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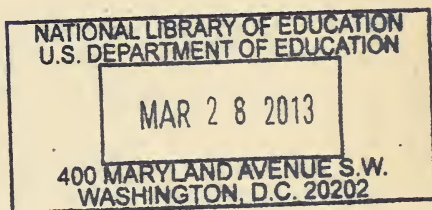
N. H. R. DAWSON, Commissioner.

REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR



THE YEAR 1887-88.

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THE UNITED STATES
BUREAU OF EDUCATION.

Created as a Department March 2, 1867.

Made an Office of the Interior Department July 1, 1869.

COMMISSIONERS.

HENRY BARNARD, LL. D.,

March 14, 1867, to March 15, 1870.

JOHN EATON, PH. D., LL. D.,

March 16, 1870, to August 5, 1886.

NATHANIEL H. R. DAWSON, L. H. D.,

August 6, 1886, to date.

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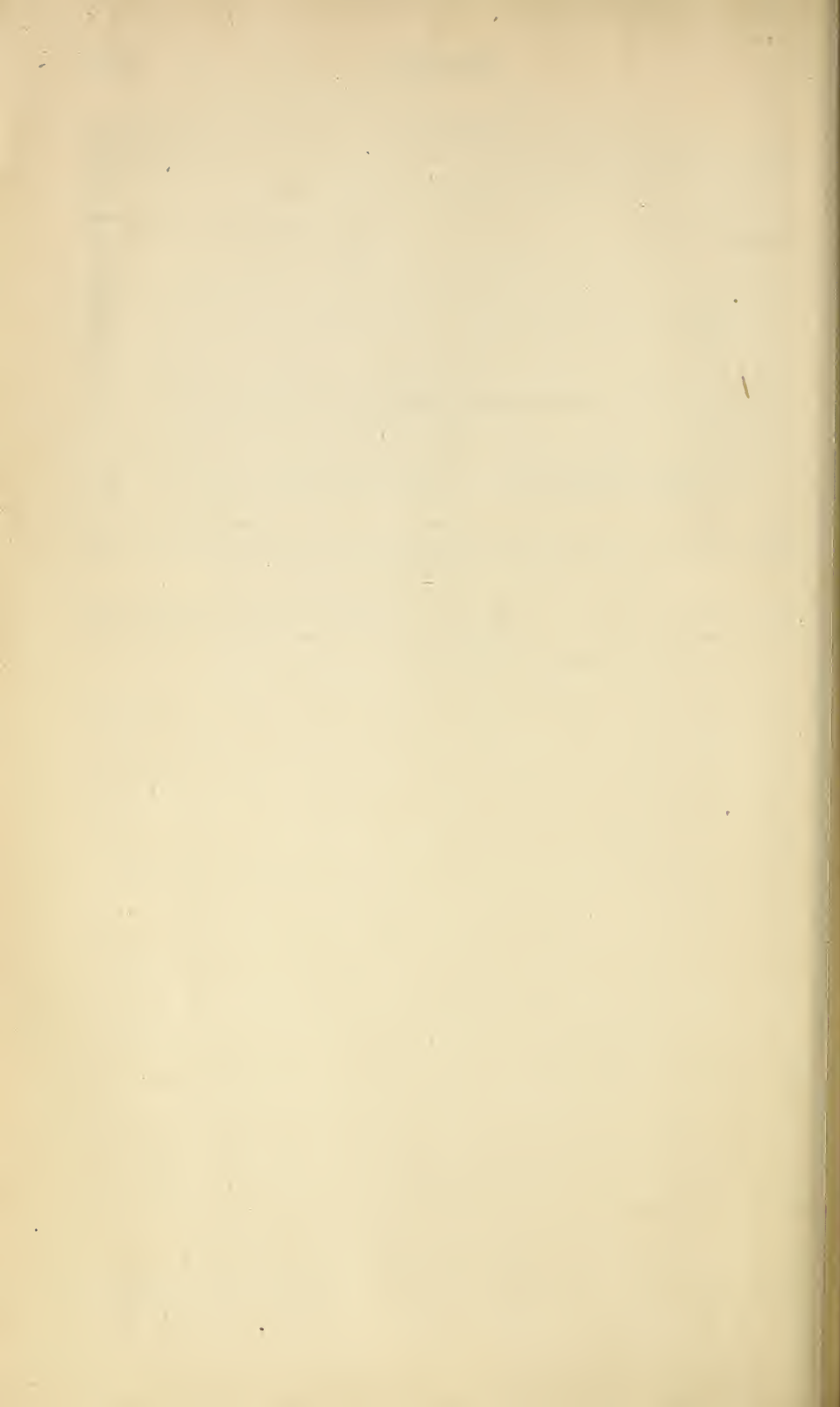
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REPORT OF THE COMMISSIONER OF EDUCATION.

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DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., August 31, 1888.

SIR: I have the honor to submit the following report of the operations of this Office during the year ending June 30, 1888.

Its work has been conducted substantially in accordance with the principles indicated in my first and second Annual Reports, modified in such directions as further experience showed to be desirable.

The assignment of employés to three divisions, and their regular occupations with the duties required by law or by the usage and regulations of the Department, have proved eminently satisfactory.

THE DIVISION OF RECORDS.

The management of the written and printed correspondence of the Office, and the care of its records, are confided to the Division of Records.

During the year under review, 15,197 written letters and 240,000 copies of documents were sent out, besides more than 14,000 statistical inquiry forms; while 11,096 written letters, 12,000 statistical returns, 44,000 acknowledgments, and 6,913 documents (books and pamphlets) were received. One copy of each of these publications was sent to the library of the Office, and the others distributed to such correspondents as the character of the documents rendered proper.

In addition to these, the Office received from the Government Printing Office 172,799 copies of the reports and circulars of information printed for its use.

Continuing a practice established under my predecessor, the laborers assigned to this Bureau have two-thirds of the watchmen's duty, rendered necessary by its separate quarters, since the Department furnishes only one of the three watchmen between whom the twenty-four hours are divided. When the very low rate at which these faithful employes are paid is taken into account, I think that this arrangement requires more of them than corresponding employes in other offices are expected to do.

THE DIVISION OF THE LIBRARY AND MUSEUM.

The library of this Office contains one of the most valuable pedagogical collections in the country. The card catalogue has rendered the contents of this collection available, and, in consequence, the library is growing more and more useful every year. Its value is already known to educationists of every grade, and it has been used during the year by many persons engaged in the investigation of educational subjects. Inquiries upon these subjects are frequently made by correspondents, not only in the United States, but in foreign countries, for information which is nowhere else so readily obtained. In response to these inquiries, over five hundred cards giving references to investigators on various subjects have been prepared. Some of these cards were the result of much careful study, coupled with elaborate research.

The library now contains over twenty-one thousand volumes and eighty thousand pamphlets, besides many thousand duplicates, which are used for exchange or distribution. Of these duplicates about ten thousand have been disposed of during the year. Some were exchanged for books needed in the library, but the greater part of them were distributed among school and college libraries in various parts of the country.

During the year two thousand volumes and twenty thousand pamphlets have been added to the collection. The volumes have been catalogued and placed on the shelves and the pamphlets indexed and filed. The books in the library have been classified, rearranged on the shelves under subjects, and a Finding List of them prepared. The preparation of this list, which began June 16, 1888, necessitated the writing of about twenty thousand cards, the copying of fifteen hundred pages of manuscript, and the handling of all the books in the library.

In the foreign section of the library the books and pamphlets of thirty-one different countries have been classified, arranged on shelves, and catalogued. This work included the making of ten thousand cards, representing fifteen different languages, and the copying and composing of six hundred and fifty pages of manuscript. The French and German books have been classified and arranged on shelves, but

some revision of this list may be necessary before it can be copied. The list of the English books is about ready for the copyist.

In view of the importance of the library to the work of the Office, and the convenience which a catalogue of all of the books upon its shelves would afford, not only to the employés of the Office, but to those interested in educational literature throughout the country, it is important that this catalogue should be printed. The appropriations for the use of the Office are not sufficient for this purpose, and following the precedent which has obtained in regard to the libraries of other bureaus in the departments, I respectfully suggest that an appropriation be made by Congress for the purpose of printing and publishing the catalogue of this library.

The collection of college catalogues is the largest and most complete of any in this country, and constitutes a valuable part of the library. Many of these catalogues have been arranged chronologically by decades, or half decades, and prepared for the bindery. Over four hundred volumes have already been bound, while many more await completion preparatory to binding. The importance of binding and preserving these catalogues becomes a matter of great interest to educators, when it is remembered that many of our leading colleges do not possess complete sets of their own publications. Colleges frequently apply to this library for catalogues, or other publications to complete their sets.

The Museum of the Office has been enriched during the year by the accession of many articles, notable among which are a set of Langl's wall views of famous buildings, and a series of casts from antique gems illustrating the literature and history of Greece and Rome. Collections of this kind would be very valuable adjuncts to all instruction given in American schools and colleges.

In making additions to the Museum, I have been guided in all cases by the advice of eminent men actually engaged in the work of education, and personally cognizant of the contents and deficiencies of the collection.

If this Bureau were housed in a building suitable to its work, and capable of storing its collections adequately, I would urge the propriety of making its library a depository for every native book, and its Museum the depository of every native map, chart, engraving, print, or apparatus intended for use in schools or bearing upon educational subjects, and I should be pleased to have you consider the propriety of recommending to Congress such an extension of the patent and copyright laws as will require proprietors of such works to deposit copies in this Office for preservation as above indicated.

While the Office remains in temporary and inconvenient quarters, or exposed to the chance of removal to others yet less suitable for the discharge of its duties, this proposition is impracticable. But I feel it my duty to suggest it now and here, in order to bear my personal testimony

to what this Bureau might become if treated with the consideration that its objects and methods justify.

THE DIVISION OF STATISTICS.

To the Division of Statistics is confided the duty of preparing such parts of the Annual Reports and other publications of the Office as do not require the constant personal attention of the Commissioner. When the general plan of a document has been settled in detail, the collection of facts, the construction of tables, the composition of text, and the correction of proof may be devolved on a corps of trained employes working in the charge of a competent chief, who is always in consultation with the head of the Office.

I have insisted ever since I took charge of the Bureau, that before all other duties, it must prepare an Annual Report upon the condition of education in this country. Consequently, the preparation of a very large part of the Annual Reports has been the principal labor of this division.

Two employes have been constantly occupied in the preparation of the Special Report on Education in Fine and Industrial Art, of which a description is given below.

In addition to the preparation of these documents, the employes of the Statistical Division have read the proof of all reports and circulars issued by the Bureau since my assumption of the Commissionership. Whenever necessary, they have also prepared the tables of contents and indexes necessary thereto and have thus added much to their practical usefulness.

I can not conclude this brief account of the division and their work without stating briefly the idea upon which I have proceeded. I have always believed that every piece of work, suited to the ability of the performer, and honestly accomplished, is directly educative in its influence, and I have therefore tried in assigning workers and work to produce an improved condition among the employes under my direction, and I have good reason to believe that they have been personally benefited by my course in this matter, much to the profit of the service.

PLAN OF THE PRESENT REPORT.

The general features of this volume resemble those of the document for last year. I have thought it advisable, however, to transfer the subject of public high schools from the chapters respecting secondary instruction to those which relate to city school systems, in order to make the treatment of public school affairs more complete and systematic. If the same course is pursued hereafter, public kindergartens will eventually be treated with other public schools.

The very full classified statistics of public libraries in the last Report are omitted from this volume, as is, also, the subject index to the earlier

publications of the Office. The space thus gained has been given to the consideration of other parts of the general subject. My two previous Annual Reports, especially the last, indicate the general direction in which I am moulding the details and shaping the contents of this volume. Simplicity, unity, consistency, and due brevity have been the objects sought to be attained. I am confident that this volume will be found more concise, more logical, and more comprehensive than its immediate predecessor.

In addition to the permanent topics which should be considered every year, researches in special directions have been prosecuted; these will be continued or replaced by others as propriety or opportunity dictates. In this way I hope to preserve the continuity essential to a series, while giving each document some marked individuality of its own.

I reserve further remarks about the contents of this volume for Chapter II.

RECENT PUBLICATIONS OF THE OFFICE.

I take this occasion to recapitulate the documents issued by this Bureau since I assumed charge of it, in the month of August, 1886. And first as to—

(A) Documents left unfinished by my predecessor, which have been completed in accordance with his designs, but printed and distributed during my incumbency, as set forth in each case:

(a) The Annual Report for 1884-85. One hundred and four pages of tabular and index matter were compiled, and 158 pages, completing the document, were printed.

(b) Circular of Information No. 1, 1886: Study of Music in Public Schools; 20 pages added, and the whole, 78 pages, printed.

(c) List of Libraries in the United States, 96 pages; tabulated and printed.

(d) The Special Report on Educational Exhibits and Conventions at the New Orleans Exposition of 1884-85, 964 pages; printed from the plates.

(e) The Special Report on Indian Education and Civilization, 693 pages; 100 pages added, the whole revised, set in type, stereotyped, and printed.

(B) Next as to documents undertaken and completed entirely during my term of office.

(a) The Annual Report for 1885-86, 813 pages.

(b) The Annual Report for 1886-87, 1,170 pages.

(c) Circular of Information No. 2, 1886: Proceedings of the Department of Superintendence of the National Educational Association for 1886, 91 pages.

(d) Circular of Information No. 1, 1887: The College of William and Mary, 89 pages.

(e) Circular of Information No. 2, 1887: The Study of History in American Colleges and Universities, 299 pages.

(f) Circular of Information No. 3, 1887: Proceedings of the Department of Superintendence of the National Educational Association for 1887, 200 pages.

(g) Circular of Information No. 1, 1888: Thomas Jefferson and the University of Virginia, 308 pages.

(h) Circular of Information No. 2, 1888: History of Education in North Carolina, 180 pages.

(i) Circular of Information No. 5, 1888: Industrial Education in the South, 86 pages.

(j) Circular of Information No. 6, 1888: Proceedings of the Department of Superintendence of the National Educational Association for 1888, 165 pages.

The foregoing items, when consolidated, show that since August, 1886, this Bureau has printed 1,771 pages of matter on hand at that date, and collected, compiled, and printed 3,621 other pages of matter, a total of 5,392 octavo pages. About 2,000 of these pages are printed in solid brevier.

(C) Lastly as to documents unfinished at the present writing.

(a) This present Annual Report, for 1887-88, which will shortly be completed, except the index.

(b) Part II of the Special Report upon American Education in Fine and Industrial Art; this work was undertaken in response to a resolution of the U. S. Senate, dated February 2, 1880; Part I—Drawing in Public Schools—was first printed in 1885 as a Senate document; next, to the number of 250 copies, in 1886, on requisition of this Bureau; and lastly in 1887, to the number of 5,000 copies, by concurrent resolution of Congress.¹ Part II is mainly devoted to an account of the movement for industrial training which is at present attracting so much attention, not only in the United States, but throughout the civilized world. It is treated in this volume with especial reference to the question of its adoption by the public schools throughout the United States. The delay in the issue of Part II has compelled considerable change in the original plan, since the movement has so rapidly developed. This work is still in charge of Mr. I. Edwards Clarke, by whom it was begun.

(c) Circular of Information No. 3, 1888: History of Higher Education in South Carolina; at the Printing Office.²

(d) Circular of Information No. 4, 1888: History of Education in Georgia; at the Printing Office.²

¹The edition of 1885 was entitled "Instruction in Drawing applied to Industrial and Fine Arts;" that of 1886 was called "Industrial and High Art Education in the United States;" and that of 1887, "American Education in Fine and Industrial Art."

²Printed and distributed before the issue of the present Report.

(e) Circular of Information No. 7, 1888: History of Education in Florida; at the Printing Office.¹

(f) A monograph on the History of Higher Education in Wisconsin; at the Printing Office.¹

(g) A monograph on the History of Higher Education in Indiana; at the Printing Office.

(h) A monograph on the History of Federal and State Aid to Higher Education in the United States; at the Printing Office.

(i) A monograph on the Teaching and History of Mathematics in Secondary and Superior Schools; at the Printing Office.

In the second chapter of this Report I present a full account of the reasons for undertaking these historical publications, of the progress in detail to date, and of the plan as a whole. I would state here, however, that in addition to those mentioned above as having been already published or sent to the Printing Office, there are now in course of preparation, and will be rapidly made ready for the press, monographs on the history of education in Ohio, Illinois, Michigan, Kentucky, Tennessee, Alabama, Mississippi, Louisiana, Texas, Arkansas, Kansas, Missouri, Iowa, Minnesota, Nebraska, Nevada, California, Colorado, Oregon, Maine, Massachusetts, New Hampshire, Vermont, Connecticut, Rhode Island, New York, New Jersey, Delaware, Pennsylvania, Maryland, and the District of Columbia. The cost of preparation has already been provided for out of the appropriations of the Office.

It will be seen at this writing, that besides this volume the Bureau is pushing, either through the press, or to completion with that purpose in view, one special report, and thirty-nine circulars of information. These publications will probably cover at least five thousand octavo pages.²

¹ Printed and distributed before the issue of the present Report.

² I venture to quote here a few testimonials as to the quality and value of the publications of the Bureau, selected almost at random from the many that have been received.

"Especially important among these publications are the large Annual Reports, the comprehensiveness of which arrests our attention. These Reports give, most completely, a general view of school affairs in the several States of the Union, and of all important changes made, matters of discipline, instruction in hygiene, and school architecture. Not only is the educational condition of the United States thus comprehensively covered, but the course of educational affairs in every civilized country is followed with an attention greater than that which we, here in Germany, are accustomed to give, depending, as we willingly do, upon the supposed excellence of our own system, an excellence that, we believe, continues to fill foreigners with envy.

"Besides these classically edited reports, as they may well be called, the Bureau publishes numerous smaller works of value."—Dr. H. G. WEISKE, *Editor Zeit. für das höhere Unterrichtswesen, Leipzig.*

"I shall esteem it a great favor if you can send me, from time to time, copies of your valuable "Circulars of Information." While holding the office of Minister of Edu-

EDUCATION IN ALASKA.

The public schools established and conducted under the supervision of this Office, and the management of the Territorial Board of Education of Alaska, are believed to have done as much good work as the means available for their support permitted.

There have been 15 public free schools in operation during the year, besides a public day school at Anvik, conducted by the missionary society of the Protestant Episcopal Church, and one each at Bethel and Carmel, conducted by the Moravian Church; also two industrial training schools, two schools on the Seal Islands maintained by the Fur Seal Company, two wholly supported by religious societies in the United States, and 17 deriving their support, their teachers, and their inspiration from the Russian Government through the Orthodox (established) Church of that Empire.

The two industrial training schools were formerly supported from appropriations for "Indian Education" disbursed and controlled by the Office of Indian Affairs. This division of control and responsibility was deemed unnecessary, and Congress consolidated the appropriation for this purpose with that for the support of other public schools in the Territory, so that all public moneys for educational purposes in Alaska during the current year have been disbursed under the supervision of this Bureau.

This is, I think, a judicious change. The so-called "Indians" of Alaska are not Indians in the sense in which the term is applied elsewhere in the United States. They are, like the other inhabitants of Alaska, self-supporting, and many of them are anxious to receive the training needed to fit their children for the duties and responsibilities of American civilization.

cation here, I derived great assistance from them, and am of the opinion that they exercise an important influence over educational affairs generally throughout the world."—Hon. JOHN A. COCKBURN, *Adelaide, South Australia*.

"I have seen a copy of the Report for 1886-87, and consider it the most valuable Report the educational department has published."—A. R. WINCHELL, *State Chemist of West Virginia*.

"Many interesting data I can glean from the precious and valuable work, Report of the Commissioner of Education for the year 1885-86."—Prof. LADISLAUS LECHNER, *of the Royal Gymnasium in Buda-Pesth, Hungary*.

"I greatly admire the Report for 1886-87. Its scope and arrangement charm me."—President H. A. CRANE, *of Nebraska Central College*.

"I have given your Report for the year 1886-87 a careful examination, and I now beg leave to say that in my estimation the document is one of the most valuable and wonderful it has ever been my privilege to consult. The patience, faith, industry, intelligence, and intrepidity necessary to the production of such a mine of information command my highest admiration. As one of the many who are to reap the benefits of this compilation, please accept my hearty thanks. The index at the close to the varied topics treated by issues from your department, is valuable in the largest degree."—Rev. ARTHUR EDWARDS, D. D., *editor of the North-Western Christian Advocate, Chicago*.

The morals of these people have been painted in the most disgusting colors by sensational tourists, who have very little opportunity of knowing the truth of their statements. The testimony of those who have lived among these people reveals a different condition of their morals. In general, the state of society is not worse than that of tribes nearer the centres of civilization. It is the repetition of the same story of civilized men coming in contact with races of inferior or partial civilization. It has always existed and will always exist. This state of depravity can only be improved by a thorough moral and intellectual intercourse and association with the better class of American citizens.

New Metlakahla.

I am happy to be able to state that the fugitive people from British Columbia, who have been converted from barbarism to civilization by Mr. William Duncan, and who removed to Annette Island in the Alexander Archipelago on account of disputes with the colonial authorities, civil and ecclesiastical, have made fair progress during the year in establishing themselves in their new home.

The island occupied by these people is about seven miles long and about one mile wide.

They have cleared, drained and prepared the land, constructed houses, and organized their affairs. A year ago, Mr. Duncan, their beloved and trusted leader, was commissioned as a magistrate by the Governor of Alaska, so that they might not lack the presence and protection of American law. They are now building houses for the accommodation of two boarding schools, with rooms for the requisite teachers, one of whom is to be a capable farmer and gardener. In other ordinary occupations they are already trained by the wise forethought of their leader, Mr. Duncan.

Their day schools during the year contained from sixty to one hundred and ten pupils; this number will probably be increased during the current year by the attendance of pupils from neighboring villages.

The following extract from a recent letter from Mr. Duncan may prove of interest:

We have just celebrated our first fourth of July in our Alaskan home. Our people kept the day in a truly loyal spirit. In holiday attire they assembled around the flag-staff in the morning. The flag was hoisted and duly saluted from our small cannon, and the brass band played appropriate airs. The children of the village, each with a flag in hand, marched and sang school songs. Canoe races and other games followed. In the evening the children were served with cakes and raisins, and adults, male and female, met in the school-room to partake of cakes and lemonade and to give expressions to their loyal feelings. Seven stirring speeches were made honoring the day, calling upon all to take fresh courage and quicken their speed.

I would respectfully recommend that a post-office be established at Metlakahla for the benefit of the colony. It contains now over one thousand inhabitants, and is the most important of the towns built up

by the native population. It is extremely desirable that these people should be provided with good mail facilities, not only on their own account, but also on account of the growing importance of this point to the future interests of the Territory.

New Regulations for Alaskan Schools.

The rules and regulations for the conduct of public schools in Alaska promulgated by your predecessor June 14, 1887, and published in my Annual Report for 1886-87, have proved, as a whole, wise and effective. Experience, however, has shown some points wherein they can be improved. The changes and additions found advisable were approved by you August 15, 1888, and are here printed to complete the record in this direction.

Amendment of Section 2 of Part 1.

The second paragraph of Section 2, Part 1, of said Rules and Regulations is amended so as to read as follows: The Governor of the Territory, the Judge of the United States Court, and the General Agent of Education in Alaska, for the time being, with two other persons, to be appointed by the Secretary, upon the nomination of the Commissioner of Education, shall constitute the Board of Education, and the General Agent of Education shall be the Secretary of said Board, and shall keep the record of its proceedings. Three members shall constitute a quorum of said Board.

Additional Rules.

SECTION 1. All missionary, boarding, or other schools, conducted by private persons or under the supervision of any of the Christian churches, which shall receive aid and assistance from the Government, shall be subject to the visitation and inspection of the Board of Education, who shall have power to see that proper discipline is maintained and instruction given, and wholesome food and proper clothing and comfortable lodging furnished to the inmates of such school.

SECTION 2. The Board of Education shall have power, and it shall be its duty, to prescribe courses of study for the several schools under its jurisdiction, and particularly to prescribe what shall be the extent and character of the industrial instruction to be given in any or all of said schools, and the teachers of said schools shall conform as nearly as practicable to the courses of study prescribed by the Board. This rule shall include such schools as receive aid from the Government.

SECTION 3. Corporal punishment shall not be excessive and shall be inflicted upon pupils in attendance upon the public and other schools only in extreme cases, and then in moderation. Any teacher who shall violate this rule shall be subject to removal and loss of pay. The Board of Education will enforce this rule rigidly, and report all violations to the Commissioner of Education.

SECTION 4. Any action taken by the Territorial Board of Education under the preceding rules shall be subject to the revision and approval of the Commissioner of Education.

Changes in the Territorial Board.

It is proper to add that in compliance with the terms of the amendment above recited, the Hon. James Sheakley, of Fort Wrangell, and Mr. William Duncan, of New Metlakatla, have been appointed members of the Territorial Board of Education.

Increased Appropriations for Alaska needed.

Justice to the different parts of the Territory requires that more schools should be opened, more school buildings erected, more supplies purchased, more teachers employed. I respectfully urge the propriety and equity of granting a substantial increase of appropriations for these most worthy objects. During the twenty-one years that have elapsed since the contract with the Alaska Fur Seal Company was made, that corporation has paid a rental into the Federal Treasury of \$55,000 per annum, or an aggregate of \$1,155,000, besides the much greater sum realized from the royalty on every seal taken.

Surely the expenditure of a fair share of this money for the training of the native inhabitants of the Territory in the habits and industries of American civilization will be both just in the present and wisely provident for the future.

Change in School-Books.

The experience of teachers in Alaskan schools emphasizes that of the teachers in Indian schools as to the unsuitable character of ordinary text-books. General S. C. Armstrong, of the Hampton Normal and Agricultural Institute, one of the wisest men engaged in the work of Indian education, has expressed his readiness "to advocate the preparation, by competent persons, of a set of school text-books for Indian schools." Mr. Arthur Grabowski, principal of Haskell Institute, says that the text-books used in Indian schools are as little adapted to the wants of the pupils as French books would be. I concur in these opinions as to Alaska also, and would suggest the propriety of taking measures whereby suitable books may be prepared by a committee of competent persons, published by arrangement with some respectable firm, and used exclusively in all Indian and Alaskan schools. These books need not cover the whole field of public education; they should, however, provide for the beginnings of work in each of the elementary branches, and be carefully adapted to the surroundings of Indian life and the peculiarities of the Indian child.

THE BUREAU'S CONTRIBUTION TO THE OHIO VALLEY CENTENNIAL.

In compliance with your desire that the several offices of your Department should make, at the Centennial Exposition of the Ohio Val-

ley and Central States, as extensive and creditable a display of their specialties as the brief time and limited funds at their command would permit (the exposition being announced to open in Cincinnati on the fourth of July), this Bureau, under instructions from Mr. Marcellus Gardner, your representative in charge of the Department's exhibit, prepared and forwarded in the latter part of June a varied assortment of articles from its museum, books from its library, and statistical charts compiled from the most recent information in its possession. Dr. A. P. Bogue, a clerk in this Bureau, who had served in connection with the Bureau's exhibits at the Philadelphia Centennial of 1876 and the New Orleans Cotton Centennial in 1884-85, was detailed for similar duty under Mr. Gardner in Cincinnati.

For general distribution at this exposition a little eight-page "folder" was compiled by Mr. John W. Holcombe, Chief Clerk of the Bureau, which briefly set forth the purpose, history, and organization of the Office, the number and character of its publications, and the part it had taken in previous exhibitions, native and foreign. This leaflet describes the exhibit at Cincinnati as follows:

"The effort of the Bureau of Education is confined strictly to setting forth its own organization, methods of doing business, and the results of its labors. Several specimen file-cases, index books, and letter-press books indicate the system of managing the records and correspondence, while a few large cards display selected statistical tables. A complete set of the publications of the Bureau is shown in thirty-three bound volumes, together with samples of reports, circulars, and bulletins, in the cloth or paper covers in which they are distributed. In six cases taken from the thirty in the museum is placed a selected display, which is intended to indicate the character and variety of the Bureau's collections. From the library is sent a representation of general educational literature; of educational reports of States, cities, and institutions, bound or filed in boxes; and of foreign educational literature and reports. The diplomas won at previous expositions, and a few selected pictures, complete the exhibit."

ESTIMATES FOR 1890-91.

I have repeated the estimates made last year for the service of the Office.¹

¹ At the meeting of the Department of Superintendence of the National Educational Association, March, 1889, a committee appointed to inquire into the needs of the Bureau of Education and the means necessary to increase its efficiency made the following report:

"The special committee to whom was referred the need of legislation to increase the efficiency and usefulness of the Bureau of Education, beg leave to submit the following report:

"The act of Congress creating the Bureau as an independent Department of Education, and intrusting its management to a Commissioner with a salary of four thousand dollars, was passed March 2, 1867.

"In 1869 a strong opposition to the new Department of Education manifested it-

With respect to the estimate for education in Alaska, I have added to the estimate previously submitted the amount usually appropriated for the support of industrial schools for Indians in that Territory, since it is proposed to transfer the support and supervision of these schools to this Bureau.

QUARTERS FOR THE OFFICE OF EDUCATION.

In my last Report I stated the reasons why the transfer of this Office to the Pension building, as required by the Act of Congress of March 3, 1887, would be injurious to its work, its collections, and its usefulness. Time has only confirmed the opinions I then expressed.

I am glad that this Act has been repealed, and that the Office will be allowed to remain in its present quarters.

The Office is under great obligations to you for the steps you took to prevent the proposed change, and I feel that the repeal of this legislation is mainly due to your personal efforts, as expressed in your letter

self, in Congress, and the act creating it was so amended as to reduce the Department to the subordinate position of an 'Office of Education,' in the Department of the Interior, and to make the management of the Office, by the Commissioner, 'subject to the direction of the Secretary of the Interior,' and the annual salary of the Commissioner was reduced to three thousand dollars.

"Under those unwise limitations the Bureau of Education has been conducted for nearly twenty years, and the fact that it has been able to render such valuable service to the cause of education is due largely to the fidelity and self-sacrificing spirit of the men who have filled the position of Commissioner. Few realize the embarrassments which have beset the duties of the Office, and fewer know how greatly its possible efficiency has been lessened by the lack of official appreciation and adequate pecuniary support.

"But in spite of all limitations and embarrassments the Bureau of Education has fully justified the wisdom of its creation. Its great value as an educational agency of the General Government is no longer questioned by anyone who knows its history and work. It has not only furnished needed assistance to those intrusted with the organization and conduct of schools and school systems, but it has from time to time responded to the call of Congress itself for valuable information on school affairs.

"It is believed that the time has now come when the Bureau of Education should be restored to its original position as an independent Department, and its management be again intrusted to the Commissioner in charge. The salary of the Commissioner should be increased to not less than five thousand dollars—the present salary of the Commissioner of Labor, and the recent salary of the Commissioner of Agriculture. The position of the Commissioner of Education never can assume its proper dignity at the seat of government so long as the Commissioner is obliged to live on the present salary, and it is certainly too much to ask the Commissioner to supplement this salary by his private means.

"The Department of Education should receive an annual appropriation sufficient for the efficient discharge of the important duties intrusted to it, and all its reports, circulars, and other information respecting educational progress should be promptly published and distributed. The practical value of the successive Annual Reports of the Bureau has been greatly lessened by their tardy issue and circulation.

"It is recommended that a committee be appointed by this body to memorialize Congress to these ends, and, if possible, secure necessary legislation.

"It is also suggested that this committee make an effort to secure such supervision of the education schedules in the next decennial census by the Commissioner of Education as will result in more accurate and valuable statistics in this department."

of July 30, 1888, which I insert here for the purpose of putting upon record the reasons against such a change as was contemplated in the Act of March 3, 1887:

DEPARTMENT OF THE INTERIOR,

Washington, July 30, 1888.

MY DEAR SIR: I observe by the sundry civil bill, as it has been reported by the Committee on Appropriations to the Senate, the only repeal of the act of March 3, 1887, which required the removal of the General Land Office, Bureau of Railroads, and Bureau of Education to the Pension building, provided for is so much as relates to the Land Office.

I do most sincerely think it will be a serious injury to the Educational Bureau and also to the Pension Bureau to compel the removal of the former into the Pension building. It can not but practically strangle the Bureau of Education for a considerable period at least, and I can not see but that it must seriously interfere with its usefulness so long as it shall remain there. There are now about forty-three clerks and people employed in the Bureau of Education, and they have a large collection of books, models, educational appliances, and bric-a-brac of various character and all contributory to enlightenment. I have visited the Pension building and can not see how this can be stored, except in great part in the fourth story. Practically, it becomes when placed there unavailable for use.

The appropriation in the legislative, executive, and judicial bill on account of the Bureau of Education is, all together, \$50,920. The rent of the building to be saved by this change is \$4,000. In order to save this sum of \$4,000 of rent, I do not hesitate to say that this action will waste \$25,000 of the appropriation for the Bureau.

I have heard the idea expressed in casual conversation that the Bureau of Education was not an instrumentality of especial value, and I fear that this idea has had something to do with the willingness to cripple it by this removal.

I do not concur at all in the sentiment; but if the sentiment is to have any influence, and especially under the plea of economy, it should take an effective direction to accomplish the latter end; and this would require that, in case of this removal being insisted upon, a great part of the force should be discharged and the appropriation made for the conduct of the Bureau diminished. I do not doubt that it could be diminished one-half, upon the theory of the removal, and as effective work be accomplished as if the same number of officers and employes shall be retained now provided for, because they can not work to advantage in such quarters as can be assigned in the Pension Bureau.

The legislative bill has made provision for the rent of the building now occupied by the Bureau of Education only until the 1st of December next, appropriating \$1,667 for the purpose, one-third of the annual rental. The time is short and the pressure upon Congress, and especially upon you, my dear sir, I recognize to be very great at this juncture. Is it not the part of wisdom to continue that Bureau where it is for the remainder of this fiscal year, which will involve but \$2,333 more (perhaps less than the cost of its removal), and review this subject at the next session with more attention than can now be allowed to it?

If it be possible for yourself, or some member of the committee, to give an hour or an hour and a half to a personal examination of the circumstances, I feel convinced you will recognize by a survey of the buildings and the property involved the imperative urgency and the wisdom of the suggestion I venture to make.

The provision for the post-office within the area of the Pension building will make that building as thoroughly occupied as almost any Government building in the city, perhaps quite as much.

I have the honor to be, my dear Mr. Chairman,

Very respectfully, your obedient servant,

WM. F. VILAS,
Secretary.

HON. WILLIAM B. ALLISON,

Chairman Committee on Appropriations, United States Senate.

Opinion of the National Educational Association.

In connection with this subject, I would respectfully call your attention to the views of the National Educational Association of the United States, as expressed in the following memorial, adopted at the session in San Francisco, Cal., July 17-20, 1888.

Whereas, The Bureau of Education at Washington City has been the means of rendering efficient service in the cause of popular education in the United States, and of collecting the largest educational library in the world, as well as one of the most complete pedagogical museums; and

Whereas, Those collections are now preserved in rented rooms wholly inadequate to meet the growing demands of the Bureau; therefore, be it

Resolved, That in order still to further the work for which the Bureau was organized, this body, representing all of the States and Territories, here assembled, does most respectfully petition the Congress of the United States to erect a suitable building to be used exclusively for the benefit of the Bureau of Education.

Resolved, That copies of these resolutions be forwarded to the President of the Senate and to the Speaker of the House of Representatives, with a request that the same may be laid before the bodies over which they respectively preside.

The National Educational Association was organized in 1857, by leading teachers from all sections of the country, and includes in its membership the most influential educators of the Union.

It now represents over three hundred thousand teachers and persons interested in the public schools and higher education.

Its wishes are certainly entitled to respectful consideration, as the interest it represents is of the highest importance to the public welfare.

A Suitable Building for the Bureau.

The experience of many years guides us to a correct determination as to the character of the quarters in which an Office like this Bureau can be located to the best advantage. Such quarters should comprise:

(1) A basement story, containing two large rooms for the storage of the publications of the Bureau, and several smaller rooms for the fuel, the heating apparatus, packing of documents for the mail, carpenter's shop, etc.

(2) A principal story, containing, in front, the main entrance to the building, and rooms for the Commissioner, chief clerk, stenographers, mail clerks, records and files, and the reception of visitors, and opening in the rear into two much larger rooms, in which the library and the museum should be kept; these two rooms should be equal in height to two stories of the front.

(3) A second story, containing rooms for clerical and statistical work; from the rearmost of these the galleries in the library and museum halls might be entered.

The most convenient form for this building would be three sides of a parallelogram, where the free sides would project rearward and contain the large rooms just described, and the third side would constitute the front, contain the smaller rooms mentioned, and unite the other sides structurally and conveniently.

The large rooms for the museum and the library should be made substantially like the rooms used for those purposes in the building recently erected for the Army Medical Museum and Library; the smaller rooms should not exceed in area eighteen by twenty-four feet and should have their longer sides facing the outside of the building; the clear height of the basement need not be more than ten feet, of the first story fifteen feet, and of the second story fourteen feet. If the basement level is fixed at six feet below that of the street, the walls including cornices need not be more than forty feet high. The halls for the library and the museum should each have an area of about three thousand feet; they could be sufficiently separated from each other on their inner flanks by a paved court or passage about ten feet wide. The front part of the building above the basement could conveniently contain ten rooms on each of its two stories, with convenient halls and stairways; and the ground covered by such a front need not be more than sixty-five hundred square feet. Such a building could be conveniently and economically constructed on a lot one hundred and seventy-five by one hundred and twenty-five feet, which would allow sufficient space for air, light, cartways, etc. The present quarters of the Bureau, which are barely sufficient for its present needs, occupy a lot about sixty by fifty feet, and the building is about sixty-five feet high above the sidewalk. If the front of the suggested building were constructed of brick, with iron beams and brick floors, and if the wings above the basement were constructed mainly of brick piers with iron frames and glass panels, it need not cost more than sixty thousand dollars; the rent paid for its present quarters is four per cent. on seventy-two thousand dollars.

EXPENDITURE OF THE BUREAU'S FUND FOR PRINTING.

I also beg to call your attention to the manner in which the money allotted by the Interior Department for the printing of this Office has been expended.

For the fiscal year 1886-87, out of the sum of \$340,000 appropriated by Congress for the printing of the Interior Department, the sum of \$21,405.42 was allotted to the Bureau of Education by the Secretary of the Interior. Of this amount, so allotted, \$15,007.28 was expended for the printing of this Office up to June 30, 1887, leaving a balance of \$6,398.14 in favor of the Bureau.

Upon a statement of these facts presented to him November 2, 1887, the First Comptroller of the Treasury decided, in a letter of the same date, that work ordered by the Office, and approved by the First Assistant Secretary in May, could and should be paid for out of the appropriation for 1886-87, though not actually performed until after June 30, 1887.

In like manner, the allotment of this Office for 1887-88, made by the Secretary of the Interior, was \$18,681.54, and on June 30, 1888, but

\$10,670.91 had been expended, while there was in the Public Printer's hands considerable unfinished work ordered previous to that date.

For 1888-89 the allotment of the Bureau is \$18,107.98, and I am informed that the Public Printer has charged against this sum, up to the 1st of March, the amount of \$16,551.19 on work—most of which was ordered by this Office during the year ended June 30, 1888, while no work ordered by this Office since that date has been completed, and but one circular, which is estimated to cost only \$830, has been begun. Less than one-half of the above amount (\$16,551.19) charged against the allotment for the present year is made up of estimates for work ordered within this year, the remainder being charged for work ordered and contracted for in the preceding year, and intended to be paid for out of the allotment for that year, which was amply sufficient for the purpose.

This results, I am informed, by cancelling at the close of each fiscal year the balance standing in favor of the Bureau, without regard to the fact that much work already ordered or contracted for remains unfinished, or not begun, and then afterwards charging the completion of such work against the fund for the next year. These proceedings work great injustice to this Office, and I beg leave to protest against them through you most earnestly and emphatically. From these causes circulars of information which have been prepared and sent to the Printing Office during the fiscal year, have remained untouched while there were abundant funds due to the Bureau to complete the same, and were afterwards charged to the fund of the succeeding year, thus causing a total loss of the balance to the credit of the Bureau at the end of the fiscal year.

During the three years enumerated the aggregate amount allotted to this Bureau, as shown above, was \$58,194.94, and the amount expended was \$42,229.38, leaving a balance unexpended of \$15,965.56. The consequence has been exceedingly unfair and injurious to the work of this Office, and has resulted in the total loss of nearly one-third of the amount allowed it for printing its publications. Work that has been in the Printing Office for months has been allowed to go unfinished while the funds were abundant, and when completed during the succeeding year, has been charged against the fund for that year.

I would respectfully bring this matter to your attention, and urgently recommend that some legislative remedy be devised by which the amount allowed this Office for printing shall not be used for other offices in the Department at the expense of the work and usefulness of the Bureau of Education.

CHAPTER II.

THE COMMISSIONER'S EDUCATIONAL STATEMENT.

The American Public School System—Condition of Public Education in the South—Facts Revealed by the Census of 1880: Adults and Minors in 1880, North and South; Wealth and Minor Population in 1880, North and South; Density of School Population in 1880, North and South; Condition of Industry in the South—Sources of School Revenue—The Record for the Year—Manual Training—The History of American Education: History of Education in Virginia; in North Carolina; in South Carolina; in Georgia; in Florida; in Indiana; in Wisconsin; Object of this Series of Monographs; History of Federal and State Aid to Higher Education.

THE AMERICAN PUBLIC SCHOOL SYSTEM.

I desire to record my unqualified adherence to the educational policy rightly known as the American common school system. No other system of education for the masses has been so fruitful of good to the people of any country. It is a system wisely provided by the people, and if the liberties of the country are to be preserved in their purity, it will be due in a great measure to the intelligence resulting from its adoption and influence. Nowhere else in the world is there so much general information and as much knowledge in regard to public affairs as in the United States.

The youth is early inspired by the examples of patriotism which are taught him in the school-room, and upon his entrance upon life is thus prepared for the high duties of citizenship.

This system of free public education is the palladium of our liberties, and its maintenance is the highest duty of the State. The public safety rests upon the intelligence of the citizen, and all the power of the State should be directed in extending the facilities of education. No public man at this day will deny the duty of the State to provide a system of free public schools for its children. Our institutions rest upon the basis of universal suffrage, and the intelligence of the citizen based on universal education is as necessary to preserve them as personal liberty is essential to their enjoyment. Universal education and universal suffrage are new developments in political economy, and are twin sisters travelling upon the same lines, depending the one upon the other for the

success and enjoyment of their blessings. Education should be afforded without price, and should be as free as the water we drink or the air we breathe. It should be confined within no narrow limits, and should be bestowed upon all the children of the country without distinction of race or condition. When each State in this Union shall have provided a system under which a school is found in every hamlet this grave public duty will be partly discharged; but not until all of the blessings flowing from such a system are brought within the easy reach of the entire youth of the country will it be fully discharged. The maintenance of such a system by taxation is as much the duty of the State as the support of the judicial, legislative, and executive branches of its government. All are equally essential to the well-being of the commonwealth. The care of the State is extended to the dependent classes, and is equally due to all of its children. Money expended in the support of these schools is bread cast upon the waters that will bear fruit tenfold in the happiness it will bestow upon the citizen and in the strength it will give the State. Private agencies may supplement but can never supercede the necessity for their support from the public revenues.

This system has taken root in all the States of the Union, and has become an essential feature in their autonomy. It has engrafted itself upon their policy and is provided for in their constitutions. Happily the system is growing with their growth, and receiving increased encouragement and support. Their action accords with the utterances of that great revolutionary patriot, Francis Marion, who, when speaking of the necessity of public education, said, "It is plainly the first duty of the government to bestow it freely upon its citizens."

I repeat what I have said heretofore, that a wise administration of the laws and the maintenance of order and happiness rest upon the virtue and intelligence of the citizen; that therefore the education of the people is one of the highest duties of the State, and that no subject is more worthy the consideration of the enlightened statesman. The public school system is also the common fountain from which the higher institutions of education draw their maintenance, and no step backward should be taken either in perfecting its excellence or in extending its usefulness.

In the language of another: "When the common school system shall have unfolded all its vast powers; when a corps of trained and educated teachers to supply all its demands shall have taken the field; when the text-books used in the schools shall be wisely selected, and the school-house built upon the most approved model; when its protection and progress shall be the first object of the government—then will all its mighty agencies to do good be felt; the public mind refined and enlightened; labor elevated, patriotism purified; our republican form of government fixed on an immutable basis; and the people crowned with its benefits and blessings."—[Gov. Andrew G. Curtin.]

CONDITION OF PUBLIC EDUCATION IN THE SOUTH.

In considering the condition of public education in the Southern States great allowance should be made for the difficulties, both political and social, through which they have passed during the last twenty years; the trials of war, loss of property, and pride and prejudice of race, have all had to be surmounted.

Time alone can change such conditions, and time only can remove sentiments which are their natural outgrowth. Many and notable have been the experiences of these years in the political life of these States.

This is but a short period in the life of a people, and is too brief a span in national life for the successful solution of great social and political problems.

It would be idle, therefore, to expect in the Southern States the same growth and results that have been accomplished where the system has been in uninterrupted operation for two centuries and the social fabric and civilization have not been disturbed by the rude hands of war, or political or social revolution. There perfection should be expected and should create no surprise. Few people who have passed through the same trials have recuperated as rapidly as the Southern people, or have adapted themselves more readily to their new conditions and addressed themselves with more fidelity and energy to the renovation of their social life and material industries.

This is eminently true of their school systems. They have directed their efforts to bestow the advantages of education equally upon the children of the two races, upon the principle that it is a duty, and that universal education alone will avert the ills of universal suffrage. They fully believe that true liberty is measured by intelligence, and that the civilization of the white man can be made valuable to the black man only through the agency of public education, and that without education good citizenship is hardly attainable. While they admit the defects in their systems of public education, and make no effort to disguise them, they know that Southern education has always had, and still has, some excellent features peculiar to itself.

With all the difficulties surrounding this subject a most gratifying improvement has taken place in their educational affairs during the last decade. Some of these States now expend one-third of their revenues in the support of their free public schools.

The reorganization of their system of public education grew out of the complete enfranchisement of the colored race, and became necessary in order to adjust their new political relations to this race under the amendments to the Constitution of the United States.

The difficulties which beset the race problem may best be understood when it is remembered that no light broke upon Thomas Jefferson through the gloom in which his mind was involved when considering the subject.

While an advocate of universal emancipation, he could not reconcile himself to the idea of the two races living side by side upon terms of equality "in political rights, duties, and powers." The result of his reflections was summed up in the words, "nothing is more certainly written in the book of fate than that these people are to be free; nor is it less certain that the two races, equally free, can not live in the same government." He was incompetent to grapple with the last proposition, and dismissed it from his thoughts as a practical question, with the hope, "under the auspices of heaven," for the emancipation of the black man.

Within less than one hundred years the dream of Thomas Jefferson has been more than realized in the complete emancipation of the black man, and in his admission to all the rights of citizenship under the constitutions of the States and the United States. It was a step attended with danger and difficulty, and many of the strongest advocates of emancipation doubted the wisdom and policy of conferring upon him the right of suffrage in his unprepared and ignorant condition.

The South accepted it in good faith as the verdict of adverse fate, and as the unavoidable result of the moral sentiment that swept away the institution of slavery, and with the determination to give it an honest support.

The spectacle is presented of two distinct races dwelling together in the same country, under the same government, in the full participation of the same political rights. While grave economic difficulties attended the solution of this problem, and grave political dangers still embarrass its realization, the question deserves to be treated with wisdom and forbearance, and it is hoped that both races will triumph over the difficulties and dangers that environ its full attainment. That the two races may permanently dwell together in peace and amity, under the protection of the same constitutional laws, is a consummation devoutly to be wished, to which the earnest support of the American people should be given.

FACTS REVEALED BY THE CENSUS OF 1880.

We must not, however, give ourselves up to a contemplation of what has been accomplished, but turn rather with renewed interest and zeal to the actual conditions affecting the further progress of education in the South. The Federal census of 1880 entered into the analysis and discussion of social conditions to an unprecedented degree. The comparative study of institutions North and South must be made in the light of the facts there disclosed, until another census shall have given us further information. Investigations of the data of the census bearing upon educational problems were begun by my predecessor, and have been continued under my direction. The results of this work have appeared from time to time in various publications of this Office, notably in Circular of Information No. 3, 1884, published by General

Eaton, and in certain special tables in my Reports for 1885-86 and 1886-87. These studies are continued in the following tables and context. The first six tables relate, as will be seen, to the social conditions directly affecting the force and growth of the school system; the remaining five relate to industrial conditions whose effects, though less obvious, are not less positive.

In the series of Reports published under my supervision, I have employed a fivefold division of the Union. A modification of this division seems desirable for the consideration before us.

This modification is shown in the annexed Map, No. 1, of the eastern and central parts of the country. By "the North" I mean all the States north of the line BD; and by "the South," all the States lying south of that line; the line AC indicates the division of "the East" from "the Centre"; all States and Territories west of Minnesota, Nebraska, Kansas, and Texas are omitted from the present discussion.

Thus, "the East" represents the "ante-Revolutionary" part of the country; "the North" shows the part which was opposed to slavery before the late civil war; "the South" includes those States in which slavery existed as a recognized factor in social, political, and industrial conditions.



MAP No. 1.—A Fourfold Division of the Eastern Part of the Union.

AB: North-Eastern. BC: South-Eastern. CD: South Central. DA: North Central.

ADULTS AND MINORS IN 1880, NORTH AND SOUTH.

The two tables first presented show the number of adults and of minors in eighteen "Northern" and sixteen "Southern" States in 1880, the proportion of adults and minors in one thousand of the population, and the number of minors to one thousand adults.

The Adult and Minor Population of the Northern States in 1880. a

"Northern" States.	Population.		Ratio to 1,000 Population.		1,000 adults support minors to the number of
	Adult (21 or more Years of Age).	Minor (under 21 Years of Age).	Adults.	Minors.	
Maine.....	377,620	271,316	582	418	716
New Hampshire.....	216,154	180,837	623	377	605
Vermont.....	192,134	140,152	578	422	730
Massachusetts.....	1,063,710	719,375	597	403	675
Rhode Island.....	162,743	113,788	589	411	698
Connecticut.....	365,918	256,782	588	412	701
New York.....	2,868,207	2,214,664	564	436	773
New Jersey.....	600,657	521,459	539	461	855
Pennsylvania.....	2,200,115	2,082,776	514	486	945
North-Eastern States.....	8,056,253	6,451,149	555	445	802
Ohio.....	1,629,447	1,568,615	509	491	965
Indiana.....	961,597	1,016,704	486	514	1,058
Illinois.....	1,506,272	1,571,599	429	571	1,045
Michigan.....	860,007	776,930	525	475	905
Wisconsin.....	640,078	675,419	487	513	1,053
Minnesota.....	374,536	406,237	477	523	1,093
Iowa.....	773,905	850,710	476	524	1,011
Nebraska.....	218,348	234,044	493	507	1,070
Kansas.....	467,641	528,255	467	533	1,141
North Central States.....	7,432,031	7,628,523	493	507	1,028
Eighteen "Northern" States.....	15,488,289	14,079,672	524	476	909

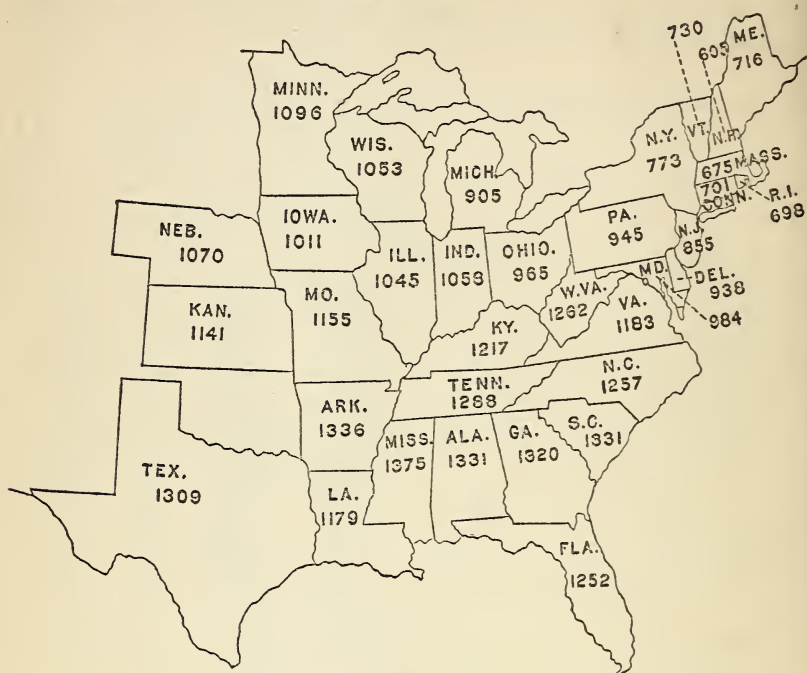
a Computed in the Bureau of Education.

The Adult and Minor Population of the Southern States in 1880. a

"Southern" States.	Population.		Ratio to 1,000 Population.		1,000 adults support minors to the number of
	Adult (21 or more Years of Age).	Minor (under 21 Years of Age).	Adults.	Minors.	
Delaware.....	75,690	70,918	516	484	933
Maryland.....	471,805	463,188	504	496	964
Virginia.....	692,836	819,729	458	542	1,133
West Virginia.....	273,580	344,877	442	558	1,262
North Carolina.....	620,731	779,019	443	557	1,257
South Carolina.....	426,647	568,930	429	571	1,331
Georgia.....	664,405	877,775	431	569	1,320
Florida.....	119,610	149,883	444	556	1,252
South-Eastern States.....	3,245,304	4,074,269	451	549	1,217
Kentucky.....	743,787	904,903	451	549	1,217
Tennessee.....	674,252	868,107	437	563	1,283
Alabama.....	541,016	721,459	429	571	1,331
Mississippi.....	476,866	654,731	421	579	1,375
Louisiana.....	431,339	508,607	450	551	1,179
Texas.....	689,852	901,897	433	567	1,309
Arkansas.....	343,151	459,374	428	572	1,336
Missouri.....	1,006,989	1,161,391	464	536	1,155
South Central States.....	4,907,252	6,180,499	442	558	1,262
Sixteen "Southern" States.....	8,252,556	10,234,763	446	554	1,242

a Computed in the Bureau of Education.

From these tables Map No. 2 is constructed. It shows for 1880 the number of persons under twenty-one years of age to each thousand of persons twenty-one or more years old.



MAP No. 2.—Number of Minors to 1,000 Adults, 1880.

The duty of sheltering, feeding, clothing, and teaching the young of a community devolves, both by nature and by law, on the mature members. Other things being equal, this duty will be more or less difficult in proportion to the relative numbers of adults and minors.

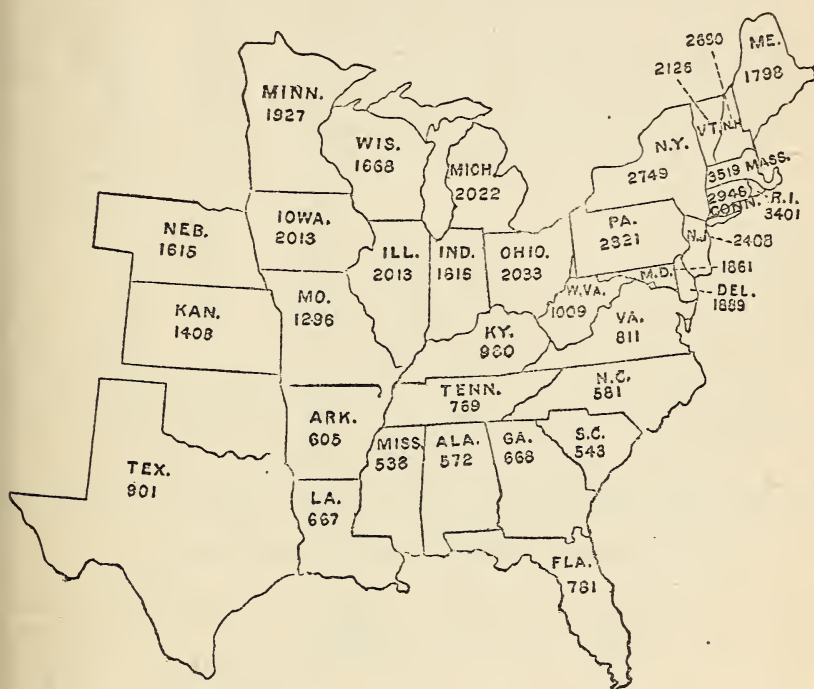
When we use the tables with Map No. 2, we arrive at some striking views. Compare Vermont and Mississippi: Vermont had 578 adults to 422 minors, or 1,000 to 730; Mississippi had 421 adults to 579 minors, or 1,000 to 1,375. Hence the burden on the adults of Vermont was little more than half as heavy as that on the adults of Mississippi.

Here, then, is the first problem in Southern education—how to overcome the difficulties arising from a very large proportion of minor population.

WEALTH AND MINOR POPULATION IN 1880, NORTH AND SOUTH.

I next present two tables, giving, for North and South, the aggregate of State, county, and local debts of each State in round millions of dollars; the true valuation of all real and personal property in each State, also in round millions; the difference between debt and valuation, or the "net" value of property in each State, also in round mill-

ions; and, lastly, the amount of "net" property, in dollars, per capita of the minor population of each State. This per capita amount is, in other words, the net fund that is capable of being taxed for the support and education of each minor citizen. The larger this amount per capita the lower will be the rate of taxation necessary to produce any specified amount of money, or the more money will be collected upon the same rate of taxation.



MAP NO. 3.—Amount of Property per capita of Minor Population in dollars.

Map No. 3 shows at a glance how much more favorably situated the North is in this respect; two of the Northern States had more than three thousand dollars per capita of minors; ten others had more than two thousand dollars per capita of minors; and the other six had more than one thousand dollars per capita of minors. Only four of the Southern States had more than one thousand dollars per capita of minors, the other twelve ranging from \$538 to \$980. Massachusetts had six and one-half times as much as Mississippi per capita of minors.

This is the second problem in Southern education—how to overcome the difficulties arising from the lack of taxable property.

The Public Debts and Net Wealth of the "Northern" States in 1880 and the Proportion of said Wealth to each Minor.

States.	Public Debts, in Millions.	Property.		
		True Valuation (Millions).	Less Public Debts.	
			Valuation (Millions).	Per Capita of Minors.
			<i>a</i>	<i>a</i>
Maine.....	23	511	488	\$1,798
New Hampshire.....	11	363	352	2,690
Vermont.....	4	302	298	2,126
Massachusetts.....	91	2,623	2,532	3,519
Rhode Island.....	13	400	387	3,401
Connecticut.....	22	779	757	2,948
New York.....	219	6,308	6,089	2,749
New Jersey.....	49	1,305	1,256	2,408
Pennsylvania.....	106	4,942	4,836	2,321
North-Eastern States.....	533	17,533	16,990	2,634
Ohio.....	49	3,298	3,189	2,033
Indiana.....	18	1,631	1,663	1,616
Illinois.....	45	3,210	3,165	2,013
Michigan.....	9	1,580	1,571	2,022
Wisconsin.....	12	1,139	1,127	1,668
Minnesota.....	9	792	788	1,927
Iowa.....	8	1,721	1,713	2,013
Nebraska.....	7	385	378	1,615
Kansas.....	16	760	744	1,408
North Central States.....	173	14,506	14,333	1,879
Eighteen "Northern" States.....	711	32,039	31,323	2,225

a Computed in the Bureau of Education.

The Public Debts and Net Wealth of the "Southern" States in 1880 and the Proportion of said Wealth to each Minor.

States.	Public Debts, in Millions.	Property.		
		True Valuation (Millions).	Less Public Debts.	
			Valuation (Millions).	Per Capita of Minors.
			<i>a</i>	<i>a</i>
Delaware.....	2	136	134	\$1,889
Maryland.....	11	873	862	1,261
Virginia.....	42	707	665	811
West Virginia.....	2	350	348	1,009
North Carolina.....	8	461	453	581
South Carolina.....	13	322	309	543
Georgia.....	20	606	586	668
Florida.....	3	120	117	781
South-Eastern States.....	101	3,575	3,474	853
Kentucky.....	15	902	887	980
Tennessee.....	37	705	668	769
Alabama.....	15	428	413	572
Mississippi.....	2	354	352	538
Louisiana.....	43	382	339	667
Texas.....	12	825	813	901
Arkansas.....	8	286	278	605
Missouri.....	57	1,562	1,505	1,296
South Central States.....	189	5,444	5,255	850
Sixteen "Southern" States.....	290	9,019	8,729	851

a Computed in the Bureau of Education.

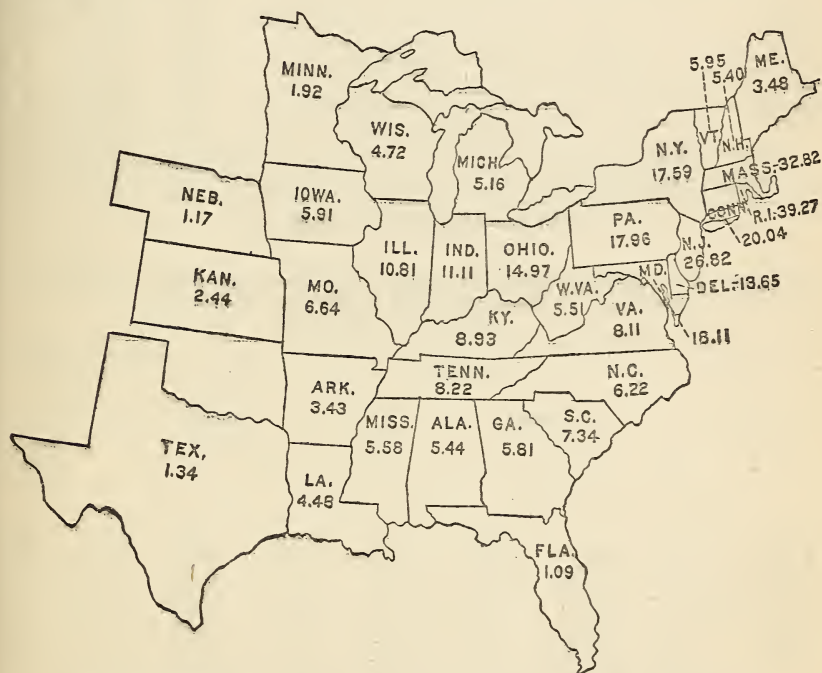
DENSITY OF SCHOOL POPULATION IN 1880, NORTH AND SOUTH.

The next two tables compare the area of the States, north and south, with the number of children of elementary school age.

Observe the comparatively large numbers of such children to the square mile in the States to the north of the Potomac and the Ohio, as shown in Map No. 4.

It is obvious that where the land is thickly settled, schools can be maintained at short distances apart; graded schools can be conducted more readily; pupils can attend more promptly and more regularly; and the teaching force can be more easily maintained.

Map No. 4 shows that forty children can be gathered into school from one square mile in Rhode Island; the same number is scattered over twenty square miles in Minnesota, and over forty square miles in Florida,



MAP NO. 4.—Number of Elementary School Population to the Square Mile in 1880.

Here is the third problem in Southern education—how to overcome the difficulties arising from a thinly settled country.

The Area of the Several "Northern" States, their Elementary School Population in 1880, and the Number of said Population per Square Mile.

States.	Area in Square Miles.	Population from 6 to 13 full Years of Age.	
		Number.	Per Square Mile.
Maine	29,893	<i>a</i> 103,956	<i>a</i> 3.48
New Hampshire	9,005	48,668	5.40
Vermont	9,135	54,332	5.95
Massachusetts	8,040	263,888	32.82
Rhode Island	1,085	42,611	39.27
Connecticut	4,845	97,106	20.04
New York	47,620	837,521	17.59
New Jersey	7,455	199,985	26.82
Pennsylvania	44,985	808,039	17.96
North-Eastern States	162,065	2,456,106	15.16
Ohio	40,760	610,201	14.97
Indiana	35,910	398,946	11.11
Illinois	56,000	605,186	10.81
Michigan	57,430	296,144	5.16
Wisconsin	54,450	257,105	4.72
Minnesota	79,205	151,892	1.92
Iowa	55,475	327,981	5.91
Nebraska	76,185	89,547	1.17
Kansas	81,700	209,419	2.44
North Central States	537,115	2,946,421	5.49
Eighteen "Northern" States	699,180	5,402,527	7.73

a Computed in the Bureau of Education.

The Area of the Several "Southern" States, their Elementary School Population in 1880, and the Number of said Population per Square Mile.

States.	Area in Square Miles.	Population from 6 to 13 full Years of Age.	
		Number.	Per Square Mile.
Delaware	1,960	<i>a</i> 26,747	<i>a</i> 13.65
Maryland	9,860	178,551	18.11
Virginia	40,125	325,433	8.11
West Virginia	24,645	136,834	5.51
North Carolina	48,580	301,901	6.22
South Carolina	30,170	221,528	7.34
Georgia	58,980	342,380	5.81
Florida	54,240	59,105	1.09
South-Eastern States	268,560	1,592,479	5.55
Kentucky	40,000	357,098	8.93
Tennessee	41,750	343,219	8.22
Alabama	51,340	281,150	5.44
Mississippi	46,340	258,790	5.58
Louisiana	45,420	203,654	4.48
Texas	262,290	350,456	1.34
Arkansas	53,045	181,991	3.43
Missouri	68,735	456,606	6.64
South Central States	609,120	2,432,064	3.10
Sixteen "Southern" States	877,680	4,025,443	4.59

a Computed in the Bureau of Education.

The foregoing tables place clearly before us the hindrances to rapid progress toward satisfactory attainment in public instruction in the South. The first, namely, "the excess of minors above adults," is peculiar to that section. The others are encountered in greater or less degree in other sections. The spirit in which they will be met may be judged by the temper and habits of the people.

One great part of the population in the South is of African descent, and inherits much of the improvident temper and desultory habits engendered by tropical life. The white population of the South is, on the other hand, singularly homogeneous in its origin, its beliefs, and its habits. It is in great measure British and Irish by descent, and has preserved much of the tenacity, pugnacity, and rigorous temper of its progenitors. Misfortunes sober and disasters do not appal such a people. The terrible losses of life and treasure during the war of 1861-65 made the impoverished remnant of white population in the South more industrious and more determined than ever before.

CONDITION OF INDUSTRY IN THE SOUTH.

The condition of industry in the South, as compared with the same in the North, deserves attention in this connection.

It is significantly set forth in the four tables that follow, derived from the census of 1880, showing the number of persons, male and female, pursuing gainful occupations in the North and South respectively at that time.

Number of Males 10 or More Years Old in the North, in 1880, Employed and not Employed in Gainful Occupations.

States.	Employed in—					Not Employed in Gainful Occupations. ^a
	Agriculture.	Professional and Personal Services.	Trade and Transportation.	Manufacturing, Mechanical, and Mining Industries.	All Gainful Occupations.	
Maine	81,887	31,604	29,090	55,884	198,465	60,122
New Hampshire	44,299	16,158	11,208	40,675	112,340	27,467
Vermont	55,037	16,022	8,772	22,586	102,417	29,619
Massachusetts	64,748	100,445	109,154	272,246	546,591	135,195
Rhode Island	10,910	15,497	14,641	46,072	87,120	17,866
Connecticut	43,936	30,647	28,838	89,192	192,663	49,729
New York	375,213	332,063	324,804	492,679	1,524,764	425,795
New Jersey	58,819	75,763	69,874	151,647	350,103	96,348
Pennsylvania	299,809	318,194	169,664	451,417	1,239,084	351,972
North-Eastern States ..	1,034,656	936,398	759,595	1,602,398	4,333,047	1,194,113
Ohio	396,120	173,909	101,445	210,362	881,836	327,599
Indiana	329,614	100,056	55,292	98,096	583,058	168,747
Illinois	433,756	157,034	125,328	177,471	893,679	284,452
Michigan	239,346	103,244	53,317	118,234	514,191	144,910
Wisconsin	194,380	64,259	36,454	75,969	371,062	132,372
Minnesota	130,817	39,741	23,979	35,511	230,048	77,401
Iowa	302,171	69,575	50,212	61,499	483,457	140,218
Nebraska	89,831	20,766	14,983	16,529	142,159	38,863
Kansas	205,234	38,289	26,119	33,292	302,934	85,214
North Central States ..	2,321,350	766,923	487,129	827,613	4,403,024	1,369,776
18 "Northern" States ..	3,356,015	1,703,321	1,246,724	2,430,011	8,736,071	2,563,889

^a Computed in the Bureau of Education.

Number of Males 10 or More Years Old in the South, in 1880, Employed and not Employed in Gainful Occupations.

States.	Employed in—					Not Employed in Gainful Occupations. ^a
	Agriculture.	Professional and Personal Services.	Trade and Transportation.	Manufacturing, Mechanical, and Mining Industries.	All Gainful Occupations.	
Delaware.....	17,609	12,055	4,704	12,284	46,652	9,351
Maryland.....	89,176	59,057	46,785	70,614	265,632	75,989
Virginia.....	238,951	87,681	29,804	54,607	411,043	105,352
West Virginia.....	106,980	22,361	10,510	24,840	164,691	52,959
North Carolina.....	314,228	34,774	15,793	28,416	393,211	72,057
South Carolina.....	208,672	34,309	13,147	15,887	272,015	52,349
Georgia.....	329,856	62,027	24,693	28,954	445,530	64,300
Florida.....	47,465	12,098	6,386	7,803	73,752	19,723
South-Eastern States..	1,352,937	324,362	151,822	243,405	2,072,526	452,080
Kentucky.....	315,445	63,438	32,761	53,788	465,432	120,992
Tennessee.....	275,620	60,304	23,196	32,442	391,562	132,997
Alabama.....	291,477	41,187	16,609	19,461	368,734	45,361
Mississippi.....	252,324	28,563	12,849	11,353	305,089	70,472
Louisiana.....	147,538	66,138	23,041	26,459	263,176	53,828
Texas.....	330,125	70,178	34,649	28,238	463,190	105,738
Arkansas.....	195,002	15,284	9,158	10,632	230,076	48,109
Missouri.....	351,681	102,403	77,721	98,211	630,016	186,946
South Central States..	2,159,212	447,495	234,984	280,584	3,122,275	764,443
16 "Southern" States.	3,512,149	771,857	386,806	523,989	5,194,801	1,216,523

^a Computed in the Bureau of Education.

Number of Females 10 or More Years Old in the North, in 1880, Employed and not Employed in Gainful Occupations.

States.	Employed in—					Not Employed in Gainful Occupations. ^a
	Agriculture.	Professional and Personal Services.	Trade and Transportation.	Manufacturing, Mechanical, and Mining Industries.	All Gainful Occupations.	
Maine.....	243	15,807	700	16,778	33,528	227,554
New Hampshire.....	191	12,048	527	17,362	30,128	116,253
Vermont.....	214	12,152	173	3,628	16,167	115,849
Massachusetts.....	227	69,715	6,222	98,019	174,183	576,214
Rhode Island.....	35	9,160	570	20,088	29,859	85,616
Connecticut.....	90	20,649	1,032	26,899	48,670	206,241
New York.....	2,247	205,829	15,115	137,190	360,381	1,670,988
New Jersey.....	395	34,959	2,508	28,914	66,776	372,364
Pennsylvania.....	1,303	128,519	10,301	76,860	216,983	1,395,176
North-Eastern States.	4,945	508,838	37,154	425,738	976,675	4,766,255
Ohio.....	1,375	76,462	2,870	31,932	112,639	1,077,293
Indiana.....	1,626	37,225	1,140	11,431	51,422	664,268
Illinois.....	2,575	72,383	3,044	28,099	106,101	985,083
Michigan.....	973	40,005	1,406	12,629	55,013	522,572
Wisconsin.....	1,521	32,235	1,096	10,541	46,393	415,885
Minnesota.....	718	19,711	370	4,278	25,077	227,451
Iowa.....	1,386	34,357	660	8,442	44,845	513,121
Nebraska.....	626	7,080	123	1,726	10,455	126,794
Kansas.....	846	15,218	260	3,027	19,351	296,798
North Central States.	11,646	336,576	10,969	112,105	471,296	4,829,265
18 "Northern" States.	16,591	845,414	48,123	537,843	1,447,971	9,595,520

^a Computed in the Bureau of Education.

Number of Females 10 or More Years Old in the South,* in 1880, Employed and not Employed in Gainful Occupations.

States.	Employed in—					Not Employed in Gainful Occupations. ^a
	Agriculture.	Professional and Personal Services.	Trade and Transportation.	Manufacturing, Mechanical, and Mining Industries.	All Gainful Occupations.	
Delaware	240	5,561	263	1,864	7,928	46,925
Maryland	1,751	39,877	2,449	14,723	58,800	294,943
Virginia	15,148	58,933	614	8,452	83,197	459,442
West Virginia	598	9,319	143	1,448	11,508	199,429
North Carolina	46,709	34,547	173	5,547	86,976	407,707
South Carolina	85,930	29,937	409	3,811	120,087	223,005
Georgia	102,348	42,242	529	7,213	152,332	381,678
Florida	11,266	5,825	60	633	17,784	73,391
South-Eastern States.	263,990	226,291	4,640	43,691	538,612	2,086,520
Kentucky	5,126	40,801	802	7,693	54,422	522,652
Tennessee	18,533	33,803	432	3,640	56,408	481,163
Alabama	89,153	31,024	344	3,535	124,056	313,629
Mississippi	87,614	20,885	126	1,792	110,417	267,715
Louisiana	57,768	31,973	1,089	4,222	95,052	232,014
Texas	29,192	27,583	260	2,108	58,943	436,325
Arkansas	21,653	8,182	75	706	30,616	223,075
Missouri	3,616	46,185	1,579	11,563	62,943	677,726
South Central States.	312,655	240,236	4,707	35,259	592,857	3,154,299
16 "Southern" States.	576,645	466,527	9,347	78,950	1,131,469	5,240,819

^a Computed in the Bureau of Education.

Reducing the numbers of the "totals" in these four tables to parts in 1,000, it is manifest that the proportion of people, both male and female, at work in the South was greater than the same class in the North.

In 1,000 males, 10 or more years of age:

	There Were Employed in—					There Were Not so Employed. ^a
	Agriculture.	Professional and Personal Services.	Trade and Transportation.	Manufacturing, Mechanical, and Mining Industries.	All Gainful Occupations.	
The "North"	296	150	111	214	771	229
The "South"	545	120	63	82	810	190

In 1,000 females, 10 or more years of age:

	There Were Employed in—					There Were Not so Employed. ^a
	Agriculture.	Professional and Personal Services.	Trade and Transportation.	Manufacturing, Mechanical, and Mining Industries.	All Gainful Occupations.	
The "North"	1	77	4	49	131	869
The "South"	90	73	4	11	178	822

^a Computed in the Bureau of Education.

It is not implied that labor in the South is as regular, as judiciously applied, or as effective as labor in the North; doubtless in many cases it is more unmethodical, and still oftener less profitable; but it is there and at work, in spite of all disadvantages of climate and all previous conditions of life. The smaller wealth and scantier leisure of the South are shown particularly in the greater proportion of females employed, and still more specially in the very large number engaged in agricultural pursuits. This applies more particularly to the colored population, which is almost entirely engaged in that branch of industry. As fast as education renders the masses in the South more apt in the performance of diversified labor, and as soon as manufacturing and mechanical industries suitable to their strength are developed and brought near their homes, we shall see a gradual transference of Southern laborers from the farm and field to other kinds of toil. But this is yet distant; and the South must always, in the future as in the past, be mainly an agricultural country.

These remarks do only partial justice to the situation in 1880; but perhaps what has been said is enough to show that the burden of public education in the South is a real and heavy one. I believe that the history of the past decade will show that, though heavy, it has been cheerfully borne, and will exhibit more favorable conditions.

The facts and relations shown by the figures given above demand certainly the serious attention of all persons interested in the public welfare, and most especially of all charged with the conduct of public affairs. If popular education be indeed the safeguard, and popular liberty the bulwark of a free government, it is a matter of grave concern if one section of the country be found struggling against disparities in the effort to secure this protection and defense. The inequalities which have been pointed out are so interwoven with all the social and business interests of the different sections that it is impossible to indicate either the extent to which equality of educational provision is possible, or the means by which it may be accomplished.

Judged by the experience of other communities the industrial condition of the South as disclosed by the census, is the most hopeful augury for the free school system. In the North industry, thrift, and liberty have found their natural outcome in a general demand for knowledge, and in determined efforts for the supply of that demand. Is it not reasonable to look for the same results in the South? Indeed her attitude with respect to that issue need no longer be simply that of hope or expectancy.

SOURCES OF SCHOOL REVENUE.

The firm hold which the free school has taken in Southern communities, as a matter for local action, is an important fact in the detailed record of the year. For proof of this statement I need only refer to a single page of that record. Table 13, Chapter III, shows the relative importance of the various sources of school revenue. From this it appears that there are twenty-four States and five Territories in which the

local tax exceeds all other sources of revenue. . Nine of these States are included in the group which I have classed as the South, as against thirteen belonging to the group which I have called the North.

But the experience of the States to which we instinctively turn for guidance in the progressive conduct of the school system, discloses also the importance of another principle of action. From the nature of things, local effort can not be uniform, nor in all cases sufficient. Hence communities are found combining their efforts to secure equal diffusion of educational privileges. This principle of combined action is illustrated in the levy of a general tax, by means of which the whole people contribute to the support of public education in the entire State. By reference to Table 13 it will be seen that, with two exceptions, the States here classed as the North levy such a tax, and that in three States of the group it yields the larger portion of the school revenues. It is a more important source of revenue in the States classed as the South. In seven of these the State tax yields more than half the support of the schools, while in three only does it afford less than one-fourth of the revenue.

It is easy to demonstrate the absolute necessity of both local and State taxation, and to show further that under certain conditions national aid may properly be invoked for the educational necessities of particular regions. This may be done either by a specific appropriation or by the appropriation of the proceeds of the sales of the public lands, and in either case the effect would be the same.

The adjustment of the two principles of public action here pointed out, their due development, and their judicious application, are among the great problems which are forced upon our thoughtful attention at the present time.

THE RECORD OF THE YEAR.

The educational record of the year is presented and discussed in the succeeding chapters of this Report. It is an interesting and suggestive, and in many respects a remarkable record. Its importance is indicated by the large amount of money and property involved in the operations of the various scholastic agencies, and by the statistics showing the number of children and youth brought under their influences. The expenditure for public education amounted to \$122,455,000 in round numbers, and more than twelve million children were enrolled in the schools, of whom eight millions were in average attendance.

The progress of this system is marked not only by the increase in material resources, teaching force, and average attendance, but also by improvements in the spirit and methods of the work.

MANUAL TRAINING.

Among the most important of these improvements is the introduction of manual training in many cities and towns. The conflict of opinion developed in the discussion of this subject arises in a measure from the widely different experiments to which the term is applied. Thoughtful

men deprecate all movements which threaten to transform the common schools, or any grade of the common schools, into instruments for industrial training in the sense of trade teaching. On the other hand, all, even the most conservative, admit that the education of the children should involve the exercise of the mind, the eye, and the hand. Upon their systematic training depends the complete development of the individual, as well as his complete preparation for industrial life. The adoption of constructive exercises as a part and parcel of our common school methods, is a movement along lines laid down by Rabelais, Comenius, Pestalozzi, and other great philosophers. It is a movement which accords with sound principles; it tends toward methods of instruction applicable to many branches of study, and yielding larger results with less friction and less waste of time than is possible in the use of purely mental exercises; but the movement should be so guarded as not to confuse or obscure the distinctions between general and particular ends in education. The great purpose of popular education is the elevation of the people, which depends upon intellectual activity and spiritual insight, rather than upon skill. As expressed by Dr. W. T. Harris in a discriminating discussion on the "Psychology of Manual Training":

Man elevates himself above the brute creation by his ability to withdraw his attention from the external world of the senses and give attention to energies, forces, producing causes, and principles. He can, in short, look from the particular to the general. He sees the particular object by his sense-perception, and reflects upon its casual processes by his intellect. Insight into the cause enables him to anticipate perception and to reinforce it. Thus without losing the particular he grasps together the whole realm of the particular in the general, * * * in mastering the cause of anything he grasps together and comprehends an indefinite series of effects. The senses perceive the particular thing or object, but the reason perceives the casual energy by reflection and introspection.

These different effects are perfectly clear to educators who, as regards manual training, differ chiefly in their opinions as to its educational value. It will not be easy to determine whether these differences of opinion are radical or not, until precise meaning is given to the expression. A notable endeavor to fix the meaning of the term "manual training" has been made in a report by Nicholas Murray Butler, chairman of the Committee on Manual Training of the New Jersey Council of Education, one of the leading advocates of the system. In this report he said:

Manual training * * * is instruction in thought-expression by means other than verbal language and gesture. It includes necessarily instruction in delineation and instruction in constructive work; whether or not the tools commonly used for working wood and iron shall be employed for the purpose of giving a part of this instruction in constructive work is a mere incident. We are of opinion that the educational value of proper instruction in the use of tools has been fully proven; but it is not to be supposed that the means of giving instruction in manual training will not improve and develop, as text-books, maps, and other school-room apparatus have improved and developed.

Mr. Butler then goes on to declare that manual training is only an ex-

tension of kindergarten principles to higher grades; and that it involves the "application of a great pedagogic principle," and is not "an attempt to improve the methods of high school instruction alone." To give practical expression to these views, the following resolution was submitted by him to the Council and passed without a dissenting vote:

Whereas, There are several and conflicting uses of the term *Manual Training*, be it hereby

Resolved, That the New Jersey Council of Education defines *Manual Training* as training in thought-expression by other means than gesture and verbal language, in such a carefully graded course of study as shall also provide adequate training for the judgment and the executive faculty. This training will necessarily include drawing and constructive work, but experience alone can determine by what special means this instruction may best be given.

Using the expression "manual training" in the sense here given, the argument for its introduction into the public school course is placed on exactly the same basis as the argument for other essential branches of education.

THE HISTORY OF AMERICAN EDUCATION.

While carrying forward the work of my predecessors in the conduct of the Bureau of Education, promoting the interest of common schools, etc., I have endeavored to advance the educational interests of the country by a systematic inquiry into the history of colleges and universities in the various States of the American Union. Beginning with the history of old William and Mary College, the Harvard of Virginia and the South, I have caused investigation to be extended throughout all the United States, embracing every individual State, by competent scholars, working under the editorial supervision of Dr. Herbert B. Adams, of Johns Hopkins University. While as yet we have only the first fruits of these educational studies in fields hitherto unbroken, nevertheless the returns have been so gratifying and so highly appreciated, both by practical educators and by the public at large, that I have continued this line of publication by the Bureau as rapidly as the State monographs have been completed.

The influence of the monograph upon William and Mary College in securing the revival of that ancient and honored institution, I have already indicated in a former Report, 1886-87, page 27, where is given a letter from General William B. Talliaferro, president of the board of governors, containing these words: "The restoration of the oldest but one of the institutions of learning in the country will be quite largely due to the valuable paper which you have published."

History of Education in Virginia.

At my request, the work of inquiry into the educational history of Virginia, so profitably begun, was continued to the University of Virginia and throughout the State. The editor devoted his special attention to Jefferson's original and unique academic foundation, the first representative of the modern university spirit in the South, if not in the country at large. The various colleges of Virginia were described in

authorized sketches by representatives of the institutions concerned. The whole work is a combination of individual and coöperative methods of treatment. The peculiar interest and importance of Jefferson's educational labors in Virginia, including his pleas for common schools and local self-government, are described more particularly in the following letter, transmitting the monograph from this Bureau to your Office:

DEPARTMENT OF THE INTERIOR,

BUREAU OF EDUCATION,

Washington, D. C., December 9, 1887.

THE HONORABLE THE SECRETARY OF THE INTERIOR,

Washington, D. C.

SIR: The interest awakened by the History of the College of William and Mary, prepared by Dr. Herbert B. Adams, of Baltimore, and published by this Bureau as Circular of Information No. 1, 1887; and the Study of History in American Colleges and Universities, also prepared by Dr. Adams, and published as Circular of Information No. 2, 1887, justifies a further inquiry into the history of higher education in the State of Virginia, and in other States of the American Union. The work should be done gradually and methodically. Without attempting to cover the entire field at once, I have thought it wise to encourage the preparation by Dr. Adams of a special monograph concerning Thomas Jefferson and the University of Virginia, with brief historical sketches of the various colleges in that State. Jefferson's work was of fundamental importance in the establishment of the University of Virginia, which is the historical successor of the College of William and Mary. The connection of the two institutions has been clearly traced by Dr. Adams in Jefferson's projects for educational reform. The first idea of the University of Virginia was the proposed transformation of the old colonial college into something higher and broader. But this idea failed of realization by reason of sectarian opposition to an Episcopal establishment. The present University of Virginia is an interesting illustration of the possible union of religious interests in the support of higher education by the State.

Jefferson was the first conspicuous advocate in this country of centralization in university education, and of decentralization in preparatory and common schools. He was a thorough believer in the concentration of State aid upon higher educational interests, and in the support of primary and secondary education by local taxation and private philanthropy. In his judgment, local government and common schools should have been established together and concurrently in the State of Virginia. He would have subdivided the counties into "hundreds" or "wards," corresponding to the militia districts, and have made the district school-house the place of local assembly and primary education. The training of every community to good citizenship and self-help by active participation in local affairs, such as the support of schools, roads, and bridges, was the ideal of popular education in the mind of Jefferson. He proposed that the children should be taught not merely reading, writing, arithmetic, and geography, but also through reading-books the history of the world and of their own country. Such an educational ideal, at once sound, sensible, and thoroughly democratic, is worthy of reconsideration after the lapse of more than a century since it was first proclaimed.

Jefferson devised an ingenious plan whereby the boys of best talent, the sons of the people, might be discovered and sent forward, although poor, to preparatory colleges, and finally to the University of Virginia. Such a plan is now in practical operation in the State of New York, in connection with Cornell University, which accepted the agricultural college land grant upon the condition of free education to talented graduates of local high schools and academies, and also prevails in many other States, where young men receive the benefits of the higher education, without charge for tuition, at the State universities and agricultural land-grant colleges. Natural selection and the survival of the fittest are great needs in American schools, colleges, and

universities. Jefferson's ideas, if they should ever be realized throughout the country, will deliver us on the one hand from the over-education of mediocrity, and on the other from the under-education of genius. It is the duty of democracy to evolve from itself the highest talent, not only for government and administration, but for the advancement of science and the arts.

The idea is far too prevalent that the American people have done their whole duty in everywhere instituting common schools by State authority. Popular education in this form is indeed a recognized necessity, and, generally speaking, it is an accomplished fact; but there is a higher form of popular education, to the necessity of which the people as a whole have not yet risen. That form is university education in the interest of good government and the promotion of science in the United States.

Washington had this higher form of education in mind when he said to Congress that "a flourishing state of the arts and sciences contributes to national prosperity and reputation," and when he advocated a national institution in which the primary object should be "the education of our youth in the science of government."

Jefferson had it in mind when he was urging the State Legislature to establish the University of Virginia, and when he thus defined the objects of the higher education:

"To form the statesmen, legislators, and judges, on whom public prosperity and individual happiness are so much to depend; to expound the principles of government, the laws which regulate the intercourse of nations, those formed municipally for our own government, and a sound spirit of legislation, which, banishing all arbitrary and unnecessary restraint on individual action, shall leave us free to do whatever does not violate the equal rights of another; to harmonize and promote the interests of agriculture, manufactures, and commerce, and by well-informed views of political economy to give a free scope to the public industry; to develop the reasoning faculties of our youth, enlarge their minds, cultivate their morals, and instil into them the precepts of virtue and order; to enlighten them with mathematical and physical sciences, which advance the arts and administer to the health, the subsistence, and the comforts of human life; and, finally, to form them to habits of reflection and correct action, rendering them examples of virtue to others and of happiness within themselves. These are the objects of that higher grade of education, the benefits and blessings of which the Legislature now propose to provide for the good and ornament of their country, the gratification and happiness of their fellow-citizens."

Jefferson's views upon the relation of the State to university education are so striking and so timely in these days, when some Legislatures are treating State universities in a grudging, short-sighted, and parsimonious spirit, that I can not refrain from quoting still further from that remarkable report which decided the establishment of the University of Virginia:

"Some good men, and even of respectable information, consider the learned sciences as useless acquirements; some think they do not better the condition of men; and others that education, like private and individual concerns, should be left to private, individual effort; not reflecting that an establishment embracing all the sciences which may be useful and even necessary in the various vocations of life, with the buildings and apparatus belonging to each, is far beyond the reach of individual means, and must either derive existence from public patronage, or not at all. This would leave us, then, without those callings which depend on education or send us to other countries to seek the instruction they require. * * * Nor must we omit to mention * * * the incalculable advantage of training up able counsellors to administer the affairs of our country in all its departments, legislative, executive, and judicial, and to bear their proper share in the councils of our National Government; nothing more than education advancing the prosperity, the power, and the happiness of a nation."

While the present monograph describes, for the encouragement of the friends of higher education, the triumph of what was called in Virginia the "holy cause of the University," after nearly fifty years of arduous struggle by Jefferson with popular indifference and local jealousy and ill-advised opposition, the study is not without its

interest for the friends of primary education, which Jefferson had quite as much at heart as university education.

He believed in aiming at the highest, as did the founders of Harvard and William and Mary Colleges. He believed that with the opening of mountain sources of learning, the lower valleys and broadening plains of popular education would the better flourish. In studying the historical origin of the University of Virginia, we discover its connection with enlarged and wide-reaching ideas of a system of public education, the influence of which should extend far beyond the borders of a single State.

In the extensive correspondence, legislative inquiries, reports of educational commissions, and legislative enactments which led to the foundation of the University of Virginia in 1819, we have a rich fund of suggestive ideas for the founders of educational institutions, whether public or private, high or low. The range of thought is from a district school to a national university. These ideas are all the more interesting, because the best of them are clearly the product of Jefferson's thoroughly democratic mind, enriched by higher education, by travel, and by an intelligent study of the best institutions of learning in the New and in the Old World. It is surprising to observe how Jefferson anticipated many of the modern educational ideas which have come into conspicuous favor since his day. For instance, non-sectarianism in university education; ethics and the languages of the Old and New Testaments as a suitable university basis for theological training; the importance of the academic study of history, politics, and economics; the teaching of history in common schools by means of reading-books; the practical value of the modern languages; the significance of German studies, particularly of Anglo-Saxon; the early English origin of free institutions; the advantage of student self-government as a substitute for faculty-espionage; physical education; military training of students; manual and industrial training; the connection of higher education with the higher interests of the American people. Jefferson seemed to recognize that our schools, colleges, and universities, if they are to serve efficiently the state or country in which they are placed, must have broad foundations, and cultivate, instead of selfish exclusiveness, a noble popularity which does honor to the Republic.

To the University of Virginia, Jefferson's creation, the whole country is indebted for the following distinguished services to the higher education: (1) The recognition of real university standards of instruction and scholarship. (2) The absolute repression of the class-system and the substitution of merit for seniority in the award of degrees. (3) The first complete introduction of the elective system. (4) The establishment of distinct "schools," in which great subjects were grouped; for example, ancient languages, modern languages, mathematics, law and politics; each school having its autonomy and its own standard of graduation. (5) The institution of constitutional government, in academic form, with an appointed president or chairman of the faculty, holding office for one year, but eligible for reappointment by the board of visitors. (6) The promotion of self-government among the students, with the cultivation of an *esprit de corps* sustaining high standards of academic honor and scholarship.

I beg leave to recommend the publication of this monograph, which illustrates the educational views and wide influence of the Father of the University of Virginia, who was also one of the founders of this Republic.

The monograph contains, besides Dr. Adams's original researches, an interesting and valuable study by one of his graduate students at the Johns Hopkins University, Mr. William P. Trent, of Richmond, who earned his degree of Master of Arts at the University of Virginia, and who, at Dr. Adams's suggestion, has investigated the influence of Jefferson's institution upon the life and thought of the South. Mr. Trent has also prepared, with very great labor, statistical tables showing the various lines of public and professional activity taken by the alumni of the University, now widely scattered throughout the Southern States.

Following these tables is an authorized sketch of the present condition and organization of the University, by Prof. John B. Minor. A bibliography of the best sources

of information is appended by the editor. Authorized sketches of Hampden-Sidney, Randolph-Macon, Emory and Henry, Roanoke, and Richmond Colleges, and of Washington and Lee University, have been secured through local coöperation. Illustrations for the work have been obtained from a variety of sources. The most interesting are copies of Jefferson's original drawings for the construction of the University buildings.

This contribution to the educational history of Virginia is the first of a State series, which, with your approval, Dr. Adams will continue to edit for the Bureau of Education. The present monograph will be followed by historical studies of education in North Carolina, South Carolina, and Georgia, by student representatives of those States.

The Bureau of Education has now in course of preparation a second coöperative series, on the history of higher education in Ohio, Indiana, Illinois, Michigan, and Wisconsin, to mark educationally the centenary of the first settlement of the old North-West Territory. This plan of work has been undertaken with your sanction and will be continued during the coming winter.

I deem it not improper, in the conclusion of this letter, to express how deeply the Bureau of Education is indebted to your generous and liberal encouragement, in its efforts to aid and broaden the scope and usefulness of its work.

In being elevated to that august tribunal which presides over one of the three departments of this great Union of States, you will carry with you the best wishes of the friends of education, and will view from a higher stand-point the value and beneficence of public education to the whole country.

I have the honor to be, very respectfully, your obedient servant,

N. H. R. DAWSON,
Commissioner.

As an index of the favorable reception and high estimation of this monograph on "Thomas Jefferson and the University of Virginia," I have requested the privilege of publishing the following grateful resolutions by the Faculty of that institution, transmitted by the chairman, Prof. William M. Thornton, to the editor of the Contributions to American Educational History:

CHAIRMAN'S OFFICE,
UNIVERSITY OF VIRGINIA, VA.,
January 2, 1889.

DEAR SIR: In enclosing a copy of resolutions passed by our Faculty at the last meeting, I venture to avail myself of the opportunity to express my own sense of obligation for your very handsome contribution to our history. Like every one else interested in this University, I have read your monograph with the greatest pleasure. Even those who are best informed as to our origins find new light shed upon them by your researches. And the work will long remain the authentic record of our foundation.

* * * * *
Very respectfully,

WM. M. THORNTON,
Chairman of Faculty.

RESOLUTIONS.

The Faculty of the University desire to place on record their sense of the value of the work performed by Prof. Herbert B. Adams, of Johns Hopkins University, in his monograph entitled "Thomas Jefferson and the University of Virginia," lately printed under the direction of the United States Bureau of Education.

Contributing, as it does, to illustrate the self-denying patriotism, the broad and enlightened views, and the profound sagacity of our illustrious founder, we cannot but regard it with a high degree of favor.

It has set before the American world in lively colors and in a most attractive manner Mr. Jefferson's tireless industry and painstaking in bringing about the establishment of the University, so as to enhance the renown even of that great statesman; and to justify the sentiment which he desired should be inscribed on his tomb that, as part of his threefold claim to the special gratitude of his countrymen, he was the Father of the University of Virginia; and it has successfully elucidated the peculiar features of the University to which Mr. Jefferson ascribed paramount importance, and has thereby rendered an essential service to the cause of liberal University education in this country.

It is therefore resolved, (1) That the thanks of the Faculty in behalf of the University, and of themselves, be tendered to Professor Adams for the tribute which he has thus paid to the "Father of the University," and to the University itself; and for the encouragement and aid which his work affords to the laborers in the sphere of the higher education of youth.

(2) That the Chairman of the Faculty be requested to cause a copy of these minutes to be transmitted to Mr. Adams.

History of Education in North Carolina.

A monograph upon the "History of Education in North Carolina" has been prepared by a native of that State, Dr. Charles Lee Smith, sometime Fellow in History at the Johns Hopkins University. Himself a graduate of a North Carolina college and well acquainted with college and university men in that State, he travelled over nearly the entire region, making a personal visitation of the leading institutions of both races. He also paid particular attention to the origin of common school education in North Carolina. Dr. Smith had the coöperation of teachers, professors, and college presidents wherever he went, and accumulated a rich fund of material information, both from personal inquiries and from original investigation of college archives. He enjoyed also the first practical use of the proof-sheets of the newly published historical records of North Carolina.

The following letter, officially addressed to you by me, will best serve to characterize this interesting and important contribution to the educational history of the Old and New South :

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., December 9, 1887.

The Honorable THE SECRETARY OF THE INTERIOR,
Washington, D. C.

SIR: In pursuance of the plan already approved by you for a systematic inquiry by the Bureau of Education into the educational history of the United States, I beg to recommend for publication the second of the series of State monographs in this direction edited by Dr. Herbert B. Adams, whose studies upon the College of William and Mary, and Thomas Jefferson and the University of Virginia, with the monograph upon the Study of History in American Colleges and Universities, formed the introduction to this new line of inquiry.

The subject of the present monograph is the history of education in North Carolina. It is an original and valuable contribution, and deserves to be widely read. In this monograph Mr. Charles Lee Smith, who has been trained in historical methods at the Johns Hopkins University and now holds a fellowship in history and poli-

tics at that institution, gives the results of a thorough and careful study of the educational history of his native State.

For North Carolina this is pioneer work. The history of education in that State has hitherto remained unwritten. That the old North State has failed to receive just recognition at the hands of some historians, is due in great measure to the fact that many important phases of her early history have remained undeveloped by her own sons, to whom they were known, and who have allowed the prejudiced statements of early chroniclers, ignorant of the facts, to be accepted without contradiction as authoritative.

The writer has traced the genesis and development of education in North Carolina from the first settlement of that State to the present time. For this purpose he is the first to exploit the colonial records, the publication of which was begun last year, and the early laws of the State. He has also utilized early newspaper files, and all the published biographical and historical works relating to his State to be found in the public libraries of Raleigh, Washington, and Baltimore, besides certain private collections and personal correspondence.

In the study of education as a growth North Carolina affords peculiar advantages. The character of the early settlers, the objects of their coming, and the results achieved by them in their struggle against oppressive government give the history of that State unusual interest. Bancroft says, "North Carolina was settled by the freest of the free," and the records of the colony show that a constant warfare was waged against oppression until freedom was won. This fact was emphasized and is illustrated in the proceedings of that meeting of patriots at Mecklenburg, in 1775, which, without doubt, is one of the most memorable events of our Revolutionary period. This struggle was for civil and religious liberty, and Mr. Smith demonstrates how intimate was the connection between the liberties and the educational history of the people. The government is, perhaps, to be censured that schools were not earlier provided. It is an error, however, to suppose, as has been stated by some writers, that there were no good schools in the State previous to the Revolution; for it is shown that there were many creditable institutions, several having a wide reputation.

The higher education has been principally treated in this sketch, although the history of primary and secondary instruction has not been neglected. The influence of certain classes of immigration and of institutions outside the State, especially of Princeton, which previous to the establishment of the University of North Carolina was largely patronized by the young men of that State, is clearly shown. Many interesting facts concerning noted educators of the State are brought out. The sketch which is given of the University of North Carolina is the first full account of that institution which has ever been written. The writer thinks no institution of this country has a more honorable record, and it is claimed that in proportion to the number of its alumni it stands second to none in the number of the distinguished public men it has given to the State and Nation.

The account which is given of its "influence upon the South" makes an admirable showing. As indicative of its wide-spread influence upon the country, a President, a Vice-President, many Cabinet officers, ministers to foreign countries, Senators, Governors, and other distinguished men are mentioned among its alumni.

President Andrew D. White said of this institution: "I remember in my young manhood the University of North Carolina was always spoken of with the greatest respect among men who knew anything about an American collegiate education. While the Universities of Virginia and Johns Hopkins have to some extent drawn attention away from it, I see no reason why its present Faculty should not give it a commanding position in the South-East of our Republic."

The subjects taught in the institutions for the secondary and the higher education are noted from time to time, thus showing the general educational development. The present status of education in North Carolina is well pictured. The work, while

strictly historical, is both practical and suggestive. Hon. Henry Barnard, the first Commissioner of Education, once said that "no subject now interesting or important can be adequately understood or further investigated unless proper pains be first bestowed upon its history. * * * There is no department of human exertion, however, in which this preliminary historical knowledge is so necessary as in education. For this there is both a general and a special reason. The education of a people bears a constant and most pre-eminently influential relation to its attainments and excellencies—physical, mental, and moral. The national education is at once a cause and an effect of the national character; and, accordingly, the history of education affords the only ready and perfect key to the history of the human race and of each nation in it—an unfailing standard for estimating its advance or retreat upon the line of human progress.

"But the special reason just alluded to is yet more in point at this time. It is, that there is no department of human exertion whose annals are more brilliant with displays of industry, talent, and genius, whether successful or unsuccessful, and consequently none in which a reference to the past will afford such abundant materials for improvement in the present."

Urging, therefore, the publication of this monograph and the encouragement of this new line of educational inquiry to be continued by the Bureau of Education, not only in the South but in the North-West and South-West and beyond the Mississippi, where such inquiries are most needed,

I have the honor to be, very respectfully, your obedient servant,

N. H. R. DAWSON,
Commissioner.

As an evidence of the cordial approval with which this monograph has been received, the following resolution, among many other favorable acknowledgements of this work which have been transmitted to me, is here published:

The Faculty of the University of North Carolina desire to express to Hon. N. H. R. Dawson, Commissioner of Education of the United States, their gratification and appreciation of the intelligent generosity and public spirit of the Bureau of Education in publishing, illustrating, and distributing the *History of Education in North Carolina* and other circulars of information, which they believe will greatly aid the cause of education in the South and throughout the country, and will prove a valuable contribution to the permanent history of education.

History of Education in South Carolina.

A fourth monograph in this new series concerns "The History of Higher Education in South Carolina," by O. Meriwether, of that State. Like Dr. Smith, trained in the historical methods of work as pursued at the Johns Hopkins University, Mr. Meriwether was favored with much original manuscript material supplied by friends and correspondents in South Carolina, and he spent one long summer vacation in the library of the Bureau of Education at Washington, digesting the materials there found for the educational history of his native State. South Carolina is hardly less memorable than old Virginia for its early attention to higher collegiate education. From the scattered condition of its population, free schools were not so numerous in South Carolina as in States more compactly settled; nevertheless, much more was accomplished in this direction than is ordinarily supposed. Some of the clas-

sical academies of South Carolina were of a very high order, notably Dr. Waddell's school, which gave John C. Calhoun his preparation for the Junior class in Yale College. South Carolina College deservedly occupies an honored place in the educational history of the South. It was there, at Columbia, that some of the best Southern men, *e. g.*, William C. Preston, George McDuffie, Hugh S. Legaré, and James Louis Petigru, were trained for public and professional life. Here, too, flourished some of the ablest professors of their time. Here labored for many years the once famous Dr. Thomas Cooper, who was Jefferson's first choice for the University of Virginia. Here taught that distinguished German-American, Dr. Francis Lieber, the pupil and friend of Niebuhr, and the first great transmitter of German historical and political science to a new world. Here Lieber wrote those remarkable works on Civil Liberty and Political Ethics upon which his fame as a scholar rests unshaken. The distinguished theologian and Presbyterian divine, Dr. James H. Thornwell, was also connected with the institution for a number of years as professor and president; as was also that great and distinguished prelate, Stephen Elliott, the first Protestant Episcopal bishop of Georgia. He declined the presidency, but was a member of the Faculty. Into the details of the research, which occupied Mr. Meriwether for many months, I can not enter in this connection. The following official letter will furnish perhaps a convenient résumé. The active exertions of the various denominations establishing schools are sketched at some length:

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., June 12, 1893.

The Honorable THE SECRETARY OF THE INTERIOR,
Washington, D. C.

SIR: The accompanying monograph, prepared by Mr. C. Meriwether, A. B., Johns Hopkins University, is designed to trace the history of higher education in South Carolina, his native State, and to give a sketch of the development of the free, or public school system. The earliest educational efforts are described, and instances are given illustrating the interest of South Carolina, when yet a colony, in providing the means for the intellectual improvement of her sons. Far from being backward in education, the colony was especially alive to the necessity of mental development. Not only were schools founded and maintained in the province by the government and through private and charitable aid, but many youths were sent to England for their education. The influence of such men on their return was so great and lasting that, even to the middle of the present century, schools in Charleston, modelled on the English plan, were very popular.

The birth of colleges was late and their growth slow; there was, therefore, chance for a good system of academies to develop. These were planted in all parts of the State, so that a good training school was within the reach of all. The number continued to increase until the outbreak of the War. Sufficient time has not elapsed for the public high schools fully to resume their place. The training given in them was thorough and advanced. It was not unusual with some of them to prepare boys for admission to the Junior class of advanced colleges. The most famous academy was that presided over by Dr. Moses Waddell, the Thomas Arnold of South Carolina. No other man in that State has taught boys who afterwards left their impress so

deeply on the political history of the country. William H. Crawford, John C. Calhoun, and George McDuffie were trained by him.

Although there is mention in the House Journal of 1723, of a proposal to establish a college, and a bill was introduced into the colonial Legislature in 1769 for this purpose, yet no action was taken until the present century. An act was passed in 1785 establishing three colleges in the State, yet only one of them ever gave collegiate instruction. In respect to collegiate education, the comparative advantages and attendance in that section are fully set forth in statistics, gathered chiefly from De Bow's Review, one of the best scientific products of the South. The college attendance in the five upper Southern States was one student to three hundred and eighty-nine white inhabitants.

The College of Charleston, while its foundation can be traced to the legislative act of 1785, has given collegiate instruction only since the first quarter of the present century. It is supported very largely by income from vested funds, the result of endowment by public-spirited citizens in and near Charleston. Over half the three hundred thousand dollars endowment was given by Mr. Baynard during the War, in 1864. The attendance has never been very large, but the training in mathematics and ancient languages has always been thorough. Every denomination of any strength in the State has founded a college. They can not be called strictly sectarian colleges, since no religious tests are required of any of the students. In the main they follow the average college course, but, owing to want of funds, they can not offer very many electives. It is gratifying to state that the funds and attendance of nearly all of them are gradually increasing. All of them, except Wofford College, at Spartanburg, are the result of the small gifts of church members. Wofford College is due to the beneficence of one man, Benjamin Wofford, a Methodist minister. At the time of his bequest, in 1850, it was probably the largest amount ever given by a Southern man for educational purposes. The War was most disastrous to all these institutions in sweeping away their endowments. The various denominations have established female schools of a fair grade.

The first attempt made to establish a general system of free schools was in 1811. The act was passed after bitter opposition on the part of some of the up-country members, and provided free instruction for all children, but gave the preference to poor children. It did not contain a provision for a supervising officer of the whole system, like the present Superintendent of Education. These mistakes were an insuperable bar to success; and although the annual appropriations were doubled in 1852, being made seventy-four thousand dollars, yet the universal testimony was that the schools were a failure. On the adoption of a new State Constitution in 1868, the present public school system was introduced. Its usefulness has been greatly increased by the efficient management since 1876.

The attention paid by the State to the education of the colored citizens is well illustrated in Claflin University, supported largely by the State. It has seventeen teachers and six courses of instruction, and its students at the last session numbered nine hundred and forty-six. It is the largest and one of the best colored schools in the South.

The most important phases of advanced instruction in South Carolina are those connected with the State institutions. The Military Academy at Charleston was designed to furnish trained soldiers for South Carolina. It receives an annual appropriation of twenty thousand dollars for the support of sixty-eight beneficiaries. Its course is modelled after that of West Point.

The College of South Carolina is the best of all the institutions in the State. It was opened for students in 1804, and has ever since exercised a strong influence on the politics of South Carolina, except during the reconstruction period. Every politician of any note in the State, except John C. Calhoun, has been for a time connected with the institution. Thomas Cooper, one of the presidents of the college, supplied the free traders with materials for their attacks upon the tariff. One of the greatest

political philosophers of America, Francis Lieber, did his work and made his reputation during a sojourn of twenty years at Columbia, S. C. These two men were the greatest scholars connected with the institution, and their reputation has carried its name and fame far and wide. Owing to the generosity of the Legislature in appropriating thirty-seven thousand dollars for the support of the college, the corps of instructors has been increased, departments have been added, and the whole outlook is more promising than ever before.

In the preparation of this paper, the library collections of the Bureau of Education in Washington have been extensively used. Special acknowledgments for assistance are due President McBryde and Prof. R. Means Davis, who supplied much manuscript material; to G. E. Manigault, M. D., of the College of Charleston, and Prof. H. T. Cook and President Charles Manly, of Furman University; to John F. Calhoun, a great-nephew of John C. Calhoun, for aid in the history of the Willington Academy, under Moses Waddell; to Hon. William A. Courtenay; to Gen. Edward McCrady, Jr.; to Gen. Geo. D. Johnston; and to many others who kindly gave the author suggestions and information. Valuable facts were also derived from a private memoir of Paul Hamilton, through whose able administration of finances it became possible for the State to found the University.

I respectfully recommend the publication of this monograph, which is one of the series prepared by the Bureau of Education.

Very respectfully yours,

N. H. R. DAWSON,
Commissioner of Education.

History of Education in Georgia.

The fifth monograph in the series of Contributions to American Educational History relates to the "History of Education in Georgia." It was prepared by Mr. Charles Edgeworth Jones, son of Col. C. C. Jones, of Augusta, the historian of Georgia.

The author, after graduating from the State University, spent several years at the Johns Hopkins University in the department of history and politics. After returning to his native State, while studying law and preparing for a professional career, he found leisure for an exhaustive study of the educational development of Georgia.

Mr. Jones's work is by far the most complete statement of the school and college opportunities offered to both races in that State. Like all the preceding monographs Mr. Jones's contains pictorial illustrations of school and college buildings and a great variety of instructive facts and statistics concerning the progress of education from the earliest period. The work will be found of great practical service by the friends of Southern education. The following prefatory letter best explains the exact scope of the monograph:

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., October 10, 1888.

The Honorable THE SECRETARY OF THE INTERIOR,
Washington, D. C.

SIR: The present monograph was prepared by Mr. Charles Edgeworth Jones, of Augusta, Ga., a son of the historian of that State, and a graduate of Johns Hopkins University. The work was undertaken by my direction under the supervision of Dr. Herbert B. Adams, editor of the present series of contributions to American Educational History, and was authorized by your predecessor.

Mr. Jones discusses the history of education in the State of Georgia. The inquiry has been carefully prosecuted, and all available sources of information appear to have been intelligently utilized.

The paper opens with a sketch of the educational advantages afforded by the few schools which existed during the colonial epoch. The information and conduct of academies after the Revolutionary War are next considered. Among the more prominent were the academies of Sunbury, and of Richmond County, which exerted a marked influence at that early period, and constituted the most important factors in the education of the sons of the infant Commonwealth.

The author then addresses himself to a review of the elementary education afforded in the rural schools, the teachers of which were supported by the tuition derived from the attending scholars.

Carefully and with an exhaustive analysis of the laws and constitutional provisions bearing upon the subject, are the rise, development, and decadence of the "poor school system" noted.

Prior to the late Civil War steps had been taken to establish a system of common schools accessible to all white children between the ages of six and eighteen. They were, however, interrupted by the War, and it was not until some five or six years after the cessation of hostilities that the present system of public schools was inaugurated. With the opportunities presented by this system for the instruction of the youths of the State, this paper deals fully.

Having discussed these preliminary topics, Mr. Jones turns his attention to the history and present status of higher education in Georgia, as represented in the University of the State and its branches, in various denominational colleges, and in special institutions designed to facilitate studies in law, medicine, theology, science, and art. All charitable and literary institutions ministering to intellectual, social, and moral improvement receive due consideration.

Upon a review of the whole subject, it will be seen that education in Georgia, both elementary and superior, is practically free, and that within the borders of that State there is no present excuse for illiteracy.

The publication of this contribution to American educational history is respectfully recommended.

Very respectfully, your obedient servant,

N. H. R. DAWSON,
Commissioner.

History of Education in Florida.

The sixth in the Southern group of State monographs is upon "Education in Florida," prepared by Prof. George Gary Bush, Ph. D., a graduate of Heidelberg University and a winter-resident in Florida for the past ten years. His competence for the work assigned him by the editor of the series is attested by his recent and valuable History of Harvard University, published by Cupples & Upham, of Boston, in the year 1886, the two hundred and fiftieth anniversary of the founding of Harvard College. Dr. Bush is also the author of various articles published in the magazine called "Education," for example, his papers on the Origin of the First "German Universities," March, May, and July, 1884. His papers on "The First Common Schools of New England" appeared in the New Englander for March and May, 1885.

A man with such a horizon of educational interest as is indicated by the previous study of these subjects was likely to do historical justice to the educational history of Florida. Dr. Bush has taken the greatest pains with his subject, in the investigation of which there were many

obstacles and limitations. Very little pioneer work had been done in this field of Southern educational history. Materials for history were scanty. The difficulty of communicating with competent local authorities was great. Visitation was far from easy. But a very creditable piece of work has been completed and delivered to the Bureau by Professor Bush, although at one time his manuscript seemed lost past recovery in the yellow fever district of Florida, whither it had been sent in the summer and autumn of 1888 for critical revision by local authorities.

The introductory letter sent to the Secretary of the Interior from this Bureau is appended :

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., November 8, 1888.

The Honorable THE SECRETARY OF THE INTERIOR,
Washington, D. C.

SIR: I have the honor to forward herewith a monograph upon the History of Education in Florida, by Prof. George Gary Bush, Ph. D. (Heidelberg).

This is one of the series of contributions to American Educational History, edited by Prof. Herbert B. Adams, Ph. D., of Johns Hopkins University, the preparation of which you approved by your letter of March 29.

This monograph, though written to accompany the series of historical papers upon Higher Education in the United States, treats not alone of higher education in Florida. Its purpose is to set forth, in addition, the growth and development of the school system of the State, and to emphasize particularly its rapid advance in all educational matters during the past decade.

Beginning with the earliest organized efforts to furnish instruction under the auspices of education societies, and the attempt to introduce the system of Fallenberg, a review is given of the journals of the Legislature previous to the adoption of the Constitution of 1868, and such facts are presented as bear upon the subjects of education. The legal organization of the school system, as it existed previous to the Civil War, is thus shown, together with the history of the school lands donated to the State, and the funds by which the schools were in part or wholly sustained. The point is made that the early legislation, with reference to schools, though effected largely by men of wealth, was for the benefit principally of the children of the poor.

Attention is called to the establishment, in 1852, of the first public school to be sustained by a tax levied upon individual property, and (though no uniform system had been secured) to the great improvement made during this decade in the condition of the schools.

The War era passed, the elaborate system of common schools provided for in the State Constitution of 1868, and by legislative acts in 1869, is reviewed at length, and the substance of these provisions embodied in the monograph. The favor with which the system was apparently received, and the rapidity with which the State board and the county boards were organized and entered upon their duties are touched upon; and then a history is given of the development of the system, of the opposition which it later encountered, of the lack of competent teachers, as also of school buildings and school funds, until an era of brighter promise is reached. From that period—less than a decade ago—the progress made in public school education has been most satisfactory, and it is shown that the aggregate results will bear favorable comparison with the educational statistics of any of the States. Statistics are given which place in contrast the earlier and later years, and exhibit the rapid increase in the number of schools, in pupils, and in funds. Mention is made of the valuable aid rendered to the State by annual contributions from the Peabody Fund and other agencies organized for like purposes.

The duties of the State superintendent of instruction and of the board of education, of the county boards and county superintendent, of the local trustees, and the teachers employed in the common schools are defined, and the relations they sustain to one another indicated.

The admirable work done by Northern societies, by the State, and by the agent of the Peabody Fund for the education of the Freedmen, from the year in which the War closed until schools for colored children were placed upon an equal footing with the other schools of the State, is traced at some length, while the eagerness of the Freedmen to learn and the progress they have made are noted, and a history of some of the more important schools established for them is briefly given.

During the past five years nothing else has done so much to elevate the standard of education in Florida as the efficient aid rendered by teachers' institutes and normal schools. These instrumentalities, which owe their success in large measure to the earnest labors and wise supervision of the present superintendent of public instruction, are described and their importance to the existing educational system acknowledged. Reference is next made to the academies established before the War, and to the present condition of the high schools which, with a single notable exception, do not compare favorably with schools of like name in the older States.

With a statement of the public lands received from the National Government for the establishment of "two seminaries of learning" and an agricultural college and university, the paper takes up the history of secondary and higher education. This begins with an act of the Legislature in 1851, in which it is provided that "two seminaries of learning shall be established, one upon the east, the other upon the west side of the Suwanee River." These seminaries were located the one at Ocala, later removed to Gainesville, the other at Tallahassee, and long remained the only public high schools in Florida. Historical sketches of these institutions are introduced, showing the work accomplished by them, their financial resources, the condition of the academic buildings and grounds, their educational appliances, and the character and attainments of their boards of instruction.

No public institution of Florida has passed through so many vicissitudes, or suffered so much for the lack of friends as the State Agricultural College. The endeavor has been made in this monograph to present with impartiality the facts of its history, including the acts of various Legislatures with reference to its location, establishment, board of management, and finances; and evidence is adduced to show that it is now well worthy of the patronage of the State, possessing as it does an able and energetic Faculty, commodious buildings and grounds, collections in natural history, in mineralogy and geology, a well-equipped laboratory, an experimental station furnished with excellent appliances for the study of agriculture, and a manual training school which affords practice in working in wood and metal, and the best facilities for draughting and designing. A page is devoted to the Florida University, with its meteoric appearance and brief history, to which is appended a sketch of the literary and scientific career of its founder and chancellor, the Rev. John Kost, LL. D.

The remainder of the paper is devoted to a description of the colleges founded and sustained by various religious societies, to which are added a brief mention of the State Institute for the Blind and Deaf, and references to certain schools whose aim is to furnish a good secondary education.

Of the denominational colleges, Rollins College, at Winter Park, and De Land University, at De Land, are placed in the first rank of the higher educational institutions of the State, and their history, as herewith presented, shows that in the quality of their work, the devotion of friends and increasing resources, promise is given of a successful future.

I beg leave to recommend the publication of this paper as a Circular of Information, and to subscribe myself,

Very respectfully, your obedient servant,

N. H. R. DAWSON,
Commissioner.

History of Education in the North-West—Indiana.

It should by no means be thought that educational inquiries have been confined to the Southern States. That field was first entered because it was comparatively unexplored and promised quick and valuable returns. The first group of States arranged for under the general direction of the Bureau was the group extending along the Southern Atlantic seaboard from Virginia to Florida. The second group embraced the States now occupying the old "Territory north-west of the River Ohio;" namely, Ohio, Indiana, Illinois, Michigan, and Wisconsin. In anticipation of the historical interest likely to be awakened in the observance of the centenary of the settlement of this second block of historical work in the year 1883, that result has been practically accomplished, although for various reasons the publication has been delayed.

George W. Knight, Ph. D., a graduate of the University of Michigan, and at present a professor in Ohio State University at Columbus, was selected as sub-editor for this north central group of States, and with some local co-operation has himself compiled the parts relating to the States of Ohio, Illinois, and Michigan.¹ The two remaining State monographs in the old North-West Territory were intrusted by the editor to academic representatives of those States. Indiana was taken by Prof. James A. Woodburn, of the State University at Bloomington, who has spent several years as a graduate student in Baltimore. The peculiar interest and importance of his investigation, now in the hands of the Government Printer, is indicated by the following official letter, transmitted to the Secretary of the Interior:

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., February 27, 1889.

The Honorable THE SECRETARY OF THE INTERIOR,
Washington, D. C.

SIR: The monograph which I have the honor herewith to submit gives a sketch of the history of higher education in Indiana. It contains an outline of the free common school system of the State, a brief notice of the State's educational history in the development of its common schools, and a historical account of the origin, growth, and development, and the present condition of Indiana's various institutions for higher education. It calls attention to the early land legislation of the Continental Congress, and to the important influence of that legislation upon the future States of the North-West; to the incidents and causes leading to the adoption of the Ordinance of 1787, and to the great importance of that Ordinance in the subsequent educational

¹ On the 27th of December, 1883, with my approval, a general introduction to the History of Higher Education in the North-West was presented by Professor Knight to the American Historical Association on the occasion of its Fifth Annual Meeting, held in the National Museum in this city. In the three days' programme of the Association, that day was the one especially devoted to the history of the North-West.

In advance of the educational experience of every important collegiate institution in the three States above mentioned, I have thought it expedient to present in another chapter of this Report the general introduction to the history of higher education in the North-West Territory.

development of these Commonwealths; and the sketch shows that from the earliest Territorial days until the present time the relation of the State to education, both elementary and higher, has been close and constant. At no time has the State acknowledged that any department of education, from the elementary schools to the university, was beyond its province.

When Manasseh Cutler, Rufus Putnam, Samuel H. Parsons, and their co-adjutors of Revolutionary days were planning the foundation for a free State beyond the Alleghanies, they held it to be the duty of the Government to give encouragement and support to religion and common schools. The West gained its first Puritan colony on the basis of this idea. Congressional endowments for schools and colleges were a part of the agreement asserted in the grant and settlement of western lands. Though the pressing financial straits of the old Confederacy may have been the decisive factor in securing the early land endowment, and though the policy of higher education by the State was not asserted by the Continental Congress, yet it is evident that no doubt existed in the minds of the Puritan colony who first settled the Ohio Valley, as to the duty and province of the State in education. They began their first State on the basis of Government aid for higher learning. This was to be like the first written line of their fundamental charter. The people have never departed from that principle. Though the principle of American republicanism, asserted by the Continental Congress as a part of the earliest law of these Territories, namely, that special favors should be shown to no particular sects or modes of worship, and that no orderly and peaceable person should be molested, either on account of his religious sentiments, or for the lack of them, yet it was none the less a part of that fundamental law that religion, morality, and knowledge are to be forever encouraged.

Religious people of various names, encouraged by the assurance of Government support in providing schools for their children, sought homes in the West. While they were yet pioneers upon the frontiers of civilization they began casting about them for ways and means to establish academies and colleges for the higher education. In the early years of Indiana history various religious denominations within her borders, with a spirit of zeal, courage, and self-sacrifice, founded institutions for the college training of young men. The Methodists established "Asbury," which has developed into the De Pauw University; the Presbyterians founded "Wabash" and "Hanover"; "Earlham" became a seat of learning for the Friends; Franklin College for the Baptists; and Butler University, founded under the name of the North-Western Christian University, became the literary care of the followers of Alexander Campbell. All these institutions from small beginnings have grown into prosperous condition. This sketch contains an account of their origin, their early conditions, and their development. The influence which they have exerted for good, in extending knowledge, and in training men and women for worthy citizenship, is beyond estimate. No one who appreciates the importance of education in a government by the people will fail to recognize the great services of these institutions to the State.

The direct work of the State in higher learning is to be especially noticed.

The most interesting phase in the history and development of education in the West is to be seen in the attitude of the State. There never has been a time when the right of government to provide for education of some kind has been called in question by any considerable body of thinking people. Both the elementary and the higher education were provided for by many of the early colonies, especially by those of New England. And from the time of the first land grant for common school purposes by the Congress of 1785, State aid to education has been an acknowledged principle of the American people, even those of the most conservative individualism conceding in some measure the right and duty of the State to educate.

As to the extent to which State aid may be carried, and in what provinces it may operate, there is to be noticed a very wide difference of opinion. The discussion on

that subject runs back at least to Plato. Between the state of the public mind on this theme a hundred years ago, and the prevailing opinion of to-day, a wide and significant difference is to be distinguished. In the public conception of the relation of the State to education there have been many changes and much growth. The evolution of the State university, one of the most recent of educational phenomena, and also one of the most interesting, is the outcome of these changing opinions. It is the origin and history of State institutions for higher learning to which this sketch directs especial attention. For this study the States of the North-West offer a productive and peculiar field. Those who are interested in studying the principle of State control of education will find in such a sketch as this some interesting illustrations and some useful experience. The educational history of Indiana will serve to show how dominant is the idea that all functions of education have come to be vested in the State.

At the time these western Territories were settled, and the first of their States was admitted to the Union, it was a dominant idea in the public mind that primary education might well be promoted by the State, but that the higher education should be left to the control of religious denominations, or to private benevolence. It was generally understood that most of the great universities of the world had been established by the church or by the king as the kind parental guardian of his people. It was forgotten that whatever church or prince had to give was derived for the most part from the people at large. Says President Charles Kendall Adams, of Cornell University: "Bologna, Paris, Oxford, Prague, Salamanca, and Cambridge were endowed in some cases by the church, in others by kings and princes, but in all cases with moneys which came directly or indirectly from the masses of the people. A peculiarity of the situation at the beginning of our national era was the fact that, while the State was inclined to keep its hold on the education of children, it appeared to be not unwilling to abandon its direction of the education of youth. In colonial and provincial days, the State, as we have seen, had all grades of education under its fostering care; but now that the churches began to contend with one another for the occupancy of the field in higher education, the State showed an unmistakable tendency to leave the endowment of the higher grades of schools to the churches. The doctrine was often put forward, and soon came to be very generally held, that the moral and religious character of students in the higher schools of learning would be unsafe unless such schools were under the direct control of the religious denominations—a doctrine built upon the singular postulate that children, so long as they are at an age that is peculiarly susceptible to religious impressions, may safely be left under the guidance of State schools, while at the moment they emerge from that age and enter upon a period less susceptible to such impressions, they must be under a more careful religious guidance than any which schools established by the State can afford."

This condition of the public mind at the time of the earliest organization of States in the North-West Territory led in large measure to decentralization of effort in the establishing and the fostering of colleges. A generation later, in the newer States, there was a tendency toward centralization in a single university. The result of the differing policies may be seen in the numerous colleges of Ohio on the one hand, and the development of the University of Michigan upon the other. Indiana illustrates the effects of these conflicting ideas. In the first part of the century her people were influenced largely by the early opinions. The tendency to-day is toward more vigorous State support and toward centralization of effort. A study of such an educational history can not fail to be profitable to the student of educational problems. President Adams points out the significant fact that there were two great statesmen of those early days who, above all, appreciated the paramount importance of the establishment by the State of institutions for higher learning; who looked forward to an education of the people, for the people, and by the people. One of these statesmen was the founder of the University of Virginia, the other entertained the loftier idea of a National University at the National Capital.

In the history of institutions for higher learning there are three phases to be easily distinguished. In the first place they may be established, endowed, and controlled by religious denominations. This has been the case with most of the great institutions of the past. The second phase is to be seen as the result of private benevolence. Clark, Cornell, Vassar, and Johns Hopkins are examples. In the third phase we see the college and the university founded and maintained by the State. President Gilman, of the Johns Hopkins University, in a recent lecture at that institution on "The Relation of the State to Education," called attention to the pertinent fact that one tendency in higher education is very largely toward State maintenance and control; and he asserted that the North-Western States offered the best field for the study of the operation of this principle. More than twenty years ago, while then a professor in Yale College, in a discussion of the question, "What sort of schools ought the State to keep," President Gilman said: "The State may say to private parties, you may maintain the schools and we will inspect them; you shall have the responsibility, and we will bestow encouragement and bounties. This would give us universal private schools. Or the State may say to the churches, you may do this work in your own religious way, and we will oversee and assist your efforts. This would give us universal parish schools. Neither of these plans stands any chance of adoption among us, at least in this generation. Again, the State may say, we will maintain schools for the destitute and neglected only, and all who can afford to pay must look out for themselves. This would establish pauper-schools—like pauper homes in the almshouses. Or, finally, the State may establish public schools adapted to the wants of all. The discussion is practically narrowed to a choice between these two conflicting theories."

The essay from which I have quoted related, chiefly, if not entirely, to the subject of common public schools for training in the elementary branches. But the same question pertained as well to schools of higher grades. Since then, we think the discussion has closed and the question, "What sort of schools ought the State to keep," is answered in the States of the North-West by the unquestioned establishment of public schools of all grades open to all the people. The history of this establishment includes the origin and development of the State university, the State normal school, and the State agricultural and mechanical institute. This sketch is a study along these lines of thought.

It calls attention also to the development and value of the common school system. A writer in the *English Westminster Review*, for January, 1837, says: "The distinguishing feature of public education in America is that it is free. Tuition in all public schools, whether elementary or high, is essentially gratuitous; in no other country has it been so clearly recognized that it is the duty of the State to provide free instruction for all the children of its people."

Émile de Laveleye, in speaking of the United States some years ago, said: "It is not simply true that every one knows how to read, but every one does read for purposes of instruction, entertainment, participation in public affairs, direction of labor, gaining of money, or investigation of religious truth. The American Union, in consequence, uses up as much paper as France and England combined. Free to all, open to all, receiving upon its benches children of all classes, and all religious denominations, the public school obliterates social distinctions, deadens religious animosities, roots out prejudices and antipathies, and inspires in all a love of their common country, and a respect for free institutions. It is the American public school which enables their people to assimilate so great a number of foreigners every year into their nationality."

The writer of this monograph believes that in no State is the American common school system to be seen to better advantage than in Indiana. The school law of the State and its practical service have attracted favorable comment from various States of the Union, and professional educators frequently accord to it precedence over the laws of all other States. The scheme upon which the Indiana system operates and its official machinery are here presented.

The monograph also traces the early struggles of pioneers to establish a public in-

stitution for classical learning, even before the State became a member of the Union. Gen. William Henry Harrison, at the "Boro of Vincennes," in 1807, became the president of the first board of trustees of the first institution of learning founded in Indiana Territory. This was the same year that Fulton's steam-boat made its trial trip on the Hudson; it was but three years after Jefferson had completed his purchase of Louisiana, an event so freighted with future consequences to the Nation; scarcely a decade had elapsed since Great Britain had withdrawn her forces from north-western soil; nearly a quarter of a century was to elapse before the opening of the National Road offered easy immigration to the West; and it was longer still till the railway and the locomotive should appear. Along the banks of the Ohio and the Wabash, and on the larger interior streams lived a few thousand whites, while many Indian tribes lived in rude huts on the river banks, or roamed the forests of the Territory. Tecumseh and the Prophet were yet to reach the fulness of their power.

In these days, as this sketch shows, with the howl of the wolf within hearing of their homes and the smoke of the wigwam within sight, the boys of the hardy settlers were learning to read "*arma virumque cano*." The story of these times is surely not uninteresting in the history of education.

I respectfully recommend that this valuable monograph be published at the earliest possible day.

I have the honor to be, sir, very respectfully, your obedient servant,

N. H. R. DAWSON,
Commissioner.

History of Education in Wisconsin.

The Wisconsin monograph was executed under the supervision of Prof. William F. Allen, of the University of Wisconsin, by one of his advanced graduate students, Mr. David Spencer, who, amid the rich historical collections of Madison, had excellent materials for his constructive work. The accompanying letter, submitted when the monograph was officially approved for publication by the Secretary of the Interior, will suggest the general interest and character of the work:

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., October 25, 1883.

The Honorable THE SECRETARY OF THE INTERIOR,
Washington, D. C.

SIR: I have the honor to transmit herewith the manuscript of the History of Higher Education in Wisconsin. The preface will explain the nature of this work, which was prepared under the supervision of the most accomplished historian of the West, Prof. William F. Allen, of the University of Wisconsin, aided by Mr. David Spencer, one of the instructors in that institution.

This is the first of a series of monographs relating to higher education in the group of north-western States composed of Ohio, Indiana, Illinois, Michigan, and Wisconsin, and was undertaken with the approval and by the direction of the Hon. L. Q. C. Lamar, late Secretary of the Interior. It will prove a very valuable addition to the educational history of the country.

I respectfully recommend that the same be printed as a Circular of Information of this Office.

Very respectfully, your obedient servant,

N. H. R. DAWSON,
Commissioner.

Object of this Series of Monographs.

The foregoing abstracts and illustrations of completed monographs will show the nature of the work now in progress. A third block of States in the South-West and along the Gulf of Mexico has been distributed among competent educational specialists, resident in or native of that region. A fourth and larger group is that beyond the Mississippi and including all the States between that river and the Pacific Ocean.

The educational history of each State has been intrusted to competent hands, and the returns already promise a rich harvest of interesting experience. Whoever writes the history of schools, colleges, and universities in any of the States of the American Union necessarily writes, to a considerable extent, the history of culture and social progress in that State; for with educational institutions is bound up more of the intellectual and moral interests of the Commonwealth than with any other class of public institutions, excepting perhaps the church. Among all the peculiar and splendid provisions of that justly celebrated Ordinance of 1787, passed by the aid of Southern votes in the interest of north-western colonization, there is nothing grander than the words, "Schools and the means of Education shall forever be encouraged" (Journal of Congress, IV, 753). Educational and moral forces were extended across a continent by the instrumentality of good laws, and by the efficient service of pioneers in the church and state. This movement forms a chapter of American history not yet fully written, but it is worthy of a special investigation and literary treatment.

The aim of this series of documents is to present the educational history of the several States in such a manner as to awaken or revive among our citizens an interest in the great work of education, while affording suggestions of practical value to those actually engaged therein.

The monographs thus far published have been received with singular favor by all real friends of popular education, whether in its rudimentary or higher forms. Particular pains have always been taken to show the intimate and necessary relation between the higher sources of learning and the broadening rivers of popular instruction. Although the special object of the series is to trace out the history of colleges and universities in regions where such a task has never before been systematically attempted, nevertheless considerable attention has been given to common schools and secondary education. Some day, perhaps, these latter veins of popular interest will be worked more fully, although there can hardly be such picturesque variety of interest as is afforded by our American colleges and universities.

If the history of higher education in the West and South is almost unknown, because it is not yet written, the colleges of New England and of the States along the Northern Atlantic sea-board have, in most cases, an established fame and, in some cases, an extensive literature. In fact, the materials are so rich and voluminous that there is an em-

barrassment of riches for any investigator in these ancient fields. And yet there is great need of compact and readable accounts of the higher educational experience of States like Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, and Maryland. Most of the published histories of Northern colleges are burdened with an excess of personal and antiquarian details of no permanent interest, except perhaps to the trustees, faculty, and alumni of individual colleges. The histories of educational institutions, like the histories of towns, are sometimes written for a peculiar constituency. The monographs, prepared under the national auspices of the Bureau of Education, are intended not so much for the benefit of particular institutions as for the average and enlightened citizen, in short for the greatest good of the greatest number. Accordingly, the local history of our older colleges will be rewritten from State and National points of view. An attempt will be made to give the salient features in the higher educational life of New England, New York, and Pennsylvania. While holding the larger public interest in mind, the various writers will endeavor to make their reports truly representative, although within modest limits.

Throughout the entire series these main ideas have been emphasized:

(1) The higher education, without neglect of primary and secondary interests.

(2) Presentation of the subject in State monographs, at once representing the highest educational aims while conserving local and sectarian interests.

(3) Illustrations of monographs by plates and engravings, showing pictorially the institutions described, with their libraries, laboratories, and educational apparatus, as well as their external architecture.

(4) Bibliographies, indicating to students and future historians of American education the routes already traversed, suggesting the wealth of material still available, and showing to all special enquirers the way to fuller information on subjects that may be briefly sketched.

(5) Description and narrative, rather than mere mathematical statistics, which have their proper place in the Annual Reports of the Bureau of Education, but are not so appropriate for other kinds of publication.

(6) State unity, with local varieties in the grouping of higher educational institutions.

(7) The representative principle in the selection of writers and the treatment of institutions.

(8) Co-operation in the composition of State monographs.

(9) Editorial direction and critical supervision of all State returns, so that the treatment of institutions shall be in due proportion and in a strictly historical spirit.

(10) Responsibility to the Bureau of Education and the greatest possible economy in the conduct of the work.

All these principles, to the best of my knowledge and belief, have been faithfully and conscientiously observed. The work was begun

and has been carried forward by the Bureau for three years without any increase in its annual appropriations, and strictly within the letter and spirit of the law under which the Bureau was originally created. This Office was established in the year 1867 "*to collect statistics and facts showing the condition and progress of education in the several States and Territories.*" While the collection of educational statistics is one of the primary duties of the Bureau, the gathering of historical facts which alone can illustrate the educational progress of the country is a duty no less important. Indeed, the modern conception of "statistics," as developed by the present Commissioner of Labor, Col. Carroll D. Wright, is the *historical* conception. He said, in his Cambridge address to the American Historical and Economic Associations: "*The statistician writes history. He writes it in the most concrete form in which history can be written, for he shows on tablets all that makes up the commonwealth.*"

History of Federal and State Aid to Higher Education.

A more comprehensive research than any of those hitherto described has been prepared by Mr. F. W. Blackmar, of California, upon the subject of "Federal and State Aid to Higher Education in the United States." It is a comparative historical study of the policies pursued by the several States and the Nation at large in regard to the support of advanced learning. It does not assume to be a history of education in the United States, nor even the history of State institutions of a high grade, but rather *the history of the relation of the state to higher education.* The history of education is a history of ideas, of which the function of the state in advanced learning may be considered as one. The monograph aims to trace this idea in its development, and in its various relations and applications throughout the educational history of our country. To do this successfully requires careful discrimination as to what higher education really is; and as all the facts within the scope of the subject in hand can not be reproduced without enlarging the work to undue proportions, care must be exercised in selecting the material best adapted to clearly present the subject. In order to present the paper in a condensed form statistics have been freely used, which, though they may not give a high coloring to the work, will certainly enhance its usefulness to statesmen and educators.

The first part of the monograph treats of what may be termed national education. It presents in brief, early colonial education in general, the several policies of the States, the attitude of the country at large, and the rise of the national idea in education. It discusses the function of the state in higher education as shown in the sentiments and lives of the foremost statesmen and educators of the nation, and recounts the recent history of national education.

After reviewing the history of the great legislative acts, among which the Ordinance of 1787 and the Act of 1862 are most prominent, the sig-

nificance of such institutions as the National Museum, the Congressional Library, the Bureau of Education, the Military Academy at West Point, and the Naval Academy at Annapolis is clearly shown by statistics and brief historical sketches.

The second part of the monograph is composed of short papers representing the attitude of the several States toward education and the methods adopted in their treatment of the subject. Each State is treated in its turn separately, though not without reference to others, and the principal historical facts are given relative to the protection, encouragement and support of higher education since the founding of the colonies to the present time. While the financial and legislative parts of the history receive the greater attention, sufficient collateral history is given of the institutions treated to bring clearly before the mind of the reader the several methods followed in the management of advanced education:

In short, the monograph shows in just what manner and to what extent the various States and the Federal Government have supported higher education by constitutional and legislative enactments and by appropriations and grants. One of the important conclusions reached as the result of this research is that, through a century of struggles, with alternating success and failure, the ideas pertaining to State education have been slowly crystallizing, and there is every appearance that the hopes of the early fathers on this subject will ultimately be realized.

The introductory letter transmitting the manuscript to the Secretary of the Interior from this Office is as follows:

WASHINGTON, D. C., *February 19, 1889.*

SIR: I have the honor to transmit the monograph on Federal and State Aid to Higher Education in the United States, prepared by Mr. Frank W. Blackmar, fellow in history and politics in Johns Hopkins University, which represents the progress of the State idea in education from the foundation of the colonies to the present time. It shows the attitude of each colony and of each subsequent State towards colleges and universities, and recounts that part of the legislative and financial history which relates to advanced learning in the several commonwealths. The writer discusses the rise of national education with its relation to local, and brings forward the opinions of statesmen and scholars concerning the duties and functions of the Government in public education. A brief history, accompanied by valuable statistics, is given of the various methods adopted by Congress to encourage and assist institutions of learning. But the main body of the work is devoted to the presentation in a condensed form of the plans pursued by the legislatures of thirty-eight States in the treatment of higher education. The monograph represents a wide range of research extending from the earliest colonial records and charters to the latest revised statutes.

Many inquiries of late coming from statesmen and educators, for information on this subject, have created a demand for a work on this nature. There is a desire on the part of the scholars of each State to see what has been done in other States, that mistakes may be avoided by experience and the best plans and models followed. There is likewise a general desire for a closer study of school management and school systems, based on wider information and more careful comparison of methods and results. The financial and legislative history of education furnishes a foundation for

such study and comparison. The successful management of the means of education is of prime importance; without this there is danger of complete failure. The control of the budget is the control of the state; this principle applies to institutions as well as to nations. State education has taken a strong hold particularly in the South and West, but the problems pertaining to its management, its function, and its support have not yet been fully solved.

To bring the results sharply and clearly before the reader statistics have been used quite freely, while to bring the monograph in small compass much interesting and instructive material must be passed by which would find its way into a general history of education. Statistics and cold facts, after all, are the most enduring portion of history, and will remain, if collected with care and with a single aim to recount the exact truth whatever be the consequences, when the colored light that men have thrown on truth in the name of history has disappeared. "The statistician," says the Hon. Carroll D. Wright, "chooses a quiet and may be an unlovely setting, but he knows it will endure through all time." This monograph was written with an earnest desire to present facts unbiased by any desire to prove a particular thesis.

History of this sort ought to help us to better understand our educational work as it is; it ought to dispel illusions and fortify truth. As Americans we are accustomed to indulge ourselves in a largeness of sentiment that borders on boasting when we speak of our educational institutions. It is a favorite pastime with many to imagine that their particular local institution is the best in the State, or possibly in the Nation, and that our system of higher education is equal if not superior to any in the Old World. The criticisms of men like James Bryce and the late Matthew Arnold, though unfairly presented, are in the main true, and are exceedingly helpful toward a better understanding of our position. When applied to education they ought to goad us on to a higher culture and to a more elevated standard. It is idle to deceive ourselves, by making ourselves appear greater than we are, while there are so many poorly endowed and half-equipped colleges and universities in our country, and so many thousand illiterate citizens in our midst.

To bring the work of the several States into comparison tends towards unity of sentiment and unity of design in education, and these make for patriotism and nationality. The influence of a single university on the founding and organization of others is well illustrated by such an institution as the University of Virginia or as the University of Michigan. A constant and persistent publication of the history of higher education in all of its phases will do more to harmonize our educational systems than almost any other thing. As a means of levelling local distinctions it is next to a university composed of men from all parts of the United States. Higher education needs to be centralized and harmonized.

One of the strongest inferences that may be drawn from this investigation is, that in nearly every instance the foremost desire of the people has been for colleges and universities rather than for schools of a lower grade. It was the opinion of the colonists and of the later settlers of the West and South that primary and secondary schools were essentially dependent for their existence upon higher institutions. This principle is borne out by the facts, for then, as now, wherever the best colleges and universities are there will be found the best grade of primary and secondary schools.

It is not uncommon to hear persons speak of common schools and the university as if they were entirely disconnected and what concerns one did not the other. Our fathers meant by a "common" or "free" school, one that was open to all persons on equal terms, and not necessarily a school of low grade. The meaning of the terms have changed, but it would be well to return to their primitive signification, and consider all schools, colleges and universities, high schools, secondary and primary, whether State or non-State, as schools of the people; and to consider further that what affects one class affects all, and that to build up and strengthen learning is the safest plan for insuring the perpetuity of primary and secondary schools.

This monograph was prepared at the request of the Bureau of Education, by the

author, under the supervision of Dr. Herbert B. Adams, of Johns Hopkins University, and is one of the series upon the history of higher education in the United States, and was authorized by you. I respectfully recommend its publication.

Very respectfully yours,

N. H. R. DAWSON,
Commissioner.

Hon. W. F. VILAS,
Secretary of the Interior.

Action of the National Educational Association.

At the meeting of the Department of Superintendence, March, 1889, the following resolutions, approving the recent work of the Bureau, were passed:

Whereas, The Bureau of Education has begun a systematic inquiry into the Higher Education in the United States, and has already published a series of valuable monographs upon the history of colleges and universities in various States of the American Union; and

Whereas, The Bureau has extended its inquiries into the higher educational history of the North-West, and into the historic relation of the Federal and State governments to Higher Education:

Resolved, That the Department of Superintendence cordially approves of this work, so successfully begun, and recommends its continuance throughout the American Union, and its extension to the history of secondary education, as well as the speedy publication of the monographs now on hand.

CONCLUSION.

The manuscript of this Annual Report was completed nearly three months sooner than that of the previous year, and was transmitted to the Secretary of the Interior February 25, 1889. The Report for 1886-87 was sent to the printer on the 16th of May, 1888, but was not printed and delivered to the Office until the 4th of January, 1889. I repeat, that the printing and binding of this Report should be conducted with greater dispatch.

I also call attention to the fact that the edition of this Report is entirely too small to be distributed to the large number of those interested in education, and to whom it has become almost a necessity in the conduct of their work.

In concluding this Report, I again beg to express my obligations to its correspondents, and to the friends of education generally throughout the country, for the ready and cheerful assistance which has been rendered in reply to all demands that the Office has made upon them. Without their assistance and ready co-operation the annual reports of this Office could not be prepared.

In the administration of the high duties of the Office, the catholic rule has been observed of extending its benefits to all sections of the country, without regard to creed, race, or party. In this course I have pursued the policy of this Office under the administration of my predecessors, and the spirit of the legislative enactments of the Govern-

ment. If there is one public office whose precincts should be sacred from the intrusion of sectarian or partisan prejudice growing out of the political struggles which convulse the country, it is the Office of Education.

I also beg to acknowledge my indebtedness to the employés and clerical corps of the Office, who have so intelligently performed their duties. To the Chief Clerk, Chiefs of Divisions, and all others in the Office, I renew my thanks for their hearty aid and respectful kindness and consideration; and to you I beg to return my thanks for the interest you have manifested in the work of education during your administration, and for the uniform courtesy shown me personally and officially.

I have the honor to be, very respectfully, your obedient servant,
N. H. R. DAWSON,
Commissioner.

Hon. W. F. VILAS,
Secretary of the Interior.

TO THE MEMORY OF CHARLES WARREN.

While this volume was going through the press occurred the death of Dr. Charles Warren, the Statistician of this Office, on the 9th of September, 1889.

Dr. Warren was appointed Chief Clerk of the Bureau of Education by General John Eaton, when the latter became Commissioner in 1870. In 1881 he was transferred to the position of "Statistician" of the Bureau, which he continued to hold to the day of his death.

A lover of books, and of more than ordinary culture, he was able to be of great service, not only in directing the routine duties of the Office, but in suggestions relating to its publications, and in the occasional preparation of circulars of information.

His geniality of disposition, equable temper, and kindliness of heart secured for him the attachment of his associates, and the esteem in which he was held by them will cause his death to be felt as a personal affliction.

As a mark of respect to his memory the Bureau of Education was closed on the afternoon of his funeral, by the order of the Secretary of the Interior.

CHAPTER III.

STATE COMMON SCHOOL STATISTICS.

Preliminary Remarks—Population Statistics (Table 1)—School Age and School Census (Table 2)—Enrolment (Table 3)—Average Daily Attendance (Table 4)—Total Attendance; Length of School Term (Table 5)—Number of School Buildings; Seating Capacity (Table 6)—High Schools (Table 7)—Private Schools (Table 8)—Teachers (Table 9)—Salaries of Teachers (Table 10)—School Revenues (Table 11)—School Revenues Reduced to a Per Capita Basis (Table 12)—Percentage Classification of School Revenue (Table 13)—School Expenditures (Table 14)—School Expenditures Reduced to a Per Capita Basis (Table 15)—Percentage Classification of School Expenditures (Table 16)—Permanent School Funds, Total Assessed Valuation, and Valuation of School Property (Table 17)—Chief State School Officers (Table 18).

PRELIMINARY REMARKS.

Statistical returns in whole or part for the year 1887-88 were received in time for insertion in this Report from thirty-seven States and Territories, including Georgia and Louisiana, whose returns for the calendar year 1887 are given. Nine States and Territories are represented by returns for 1886-87, one (Delaware) by a return for 1885-86, while for New Mexico the census of 1880 still furnishes the latest complete statistics that can be obtained.

The summaries for the United States and its different geographical divisions, therefore, are not for any particular date, must be considered as furnishing the latest aggregates available of enrolment, expenditure, etc.

In regard to the reliance to be placed upon the tables of State school systems much remains to be desired. Some of the causes tending to impair their trustworthiness were set forth in the last Report of this Office. No considerable improvement has been made in this respect. There is, in general, the same want of uniformity in methods, and in several cases the returns contain internal evidence of being highly incorrect. Of course these causes affect the value of the summaries and averages made.

Moreover, it is apparent that no aggregate of enrolment, attendance, or expenditure can be made for the United States without a return from every State. In no case, however, is it, or has it ever been, possible to make such an aggregate from actual returns. Estimates on the best basis practicable have to be made to fill out the blanks in the most important columns. It is believed that the errors resulting from these estimates are considerably less than those due to the causes mentioned in the preceding paragraph.

On account of these considerations the results obtained by the Bureau must be considered as mere approximations. Still by a careful study of them much valuable information may be obtained, and many conclusions drawn that are unmistakable. The lines along which the greatest development is taking place are plainly indicated.

POPULATION STATISTICS—HOW COMPUTED.

The mode of computing the statistics of population given in this table was fully set forth in a previous Report (1885-86, pp. 22-3).

The United States census of 1880 is taken as a basis; the rate of increase from 1880 in each State is assumed to be the same as the rate of increase of the school population as determined by the school census, where one is taken, which is now the case in all but eight of the States and Territories. Where the enumeration of the school population is correctly made each year or at stated periods, the total population, or the population of any specified ages, can be computed for any given date with sufficient accuracy for all practical purposes.

Where there is no school census the rate of growth from 1870 to 1880, or from 1860 to 1880, is assumed to be continued on into the present decade. Of course such an assumption may not be warranted by the facts, and may lead considerably astray. But it has been deemed the best one for the purpose, and in any case it is better to use the population so computed than to use at this late date the old figures of 1880.

TABLE 1.—*End of School Year; Total Population, and proportion thereof to area; Population 6 to 14 and proportion thereof to total population; mainly for 1887.*

State or Territory.	School Year Ended—	Estimated Total Population. ^a		Estimated Population 6-14. ^a	
		Number.	Average Number to a Square Mile.	Number.	Average Number of Persons 6 to 14 in Each 100 of Total Population.
1	2	3	4	5	6
North Atlantic Division:					
Maine.....	Mar. 31	342,784	21.5	102,970	16.02
New Hampshire.....	Mar. 31	368,600	40.9	51,699	14.03
Vermont.....	Mar. 31	333,504	36.5	54,581	16.35
Massachusetts.....	Mar. 31	2,007,356	249.7	295,374	14.71
Rhode Island.....	Apr. 30	316,542	291.7	48,047	15.18
Connecticut.....	Aug. 31	680,535	140.5	106,125	15.59
New York.....	Aug. —	5,460,536	114.7	899,750	16.48
New Jersey <i>b</i>	Aug. 31	1,309,631	175.7	231,547	17.68
Pennsylvania.....	June 4	4,911,394	109.2	926,617	18.87
South Atlantic Division:					
Delaware <i>c</i>.....	.....	158,768	81.0	28,966	18.24
Maryland.....	June 30	1,041,392	105.6	198,880	19.10
District of Columbia.....	June 30	213,143	3,552.4	36,967	17.34
Virginia.....	July 31	1,724,058	43.0	370,936	21.52
West Virginia.....	June 30	733,443	29.8	162,275	22.12
North Carolina.....	Nov. 30	1,730,460	35.6	373,229	21.57
South Carolina.....	Aug. 31	1,124,123	37.3	250,181	22.57
Georgia <i>d</i>	Dec. 31	1,726,029	29.3	383,196	22.20
Florida.....	Sept. 30	371,546	6.9	82,449	22.19
South Central Division:					
Kentucky <i>b</i>	June 30	1,866,241	46.6	404,229	21.66
Tennessee <i>b</i>	June 30	1,811,709	43.4	403,157	22.25
Alabama.....	Sept. 30	1,579,912	30.7	351,834	22.27
Mississippi <i>b</i>	Sept. 30	1,259,783	27.2	288,106	22.87
Louisiana <i>d</i>	Dec. 31	1,162,242	25.6	251,818	21.67
Texas.....	Aug. 31	2,234,157	8.5	491,985	22.02
Arkansas.....	July 31	1,214,961	22.9	275,520	22.68
North Central Division:					
Ohio.....	Aug. 31	3,370,758	82.7	643,152	19.08
Indiana.....	Aug. 31	2,115,471	58.9	426,608	20.17
Illinois.....	June 30	3,338,548	59.6	656,412	19.66
Michigan <i>b</i>	Sept. —	1,966,374	34.2	348,693	17.73
Wisconsin.....	June 30	1,656,706	30.4	323,793	19.54
Minnesota.....	July 30	1,271,204	16.0	231,024	18.17
Iowa.....	Sept. —	1,808,616	32.6	354,748	19.61
Missouri <i>b</i>	June 30	2,490,597	36.2	524,457	21.05
Dakota.....	June 30	549,019	3.7	89,838	16.36
Nebraska.....	July —	911,009	12.0	180,322	19.79
Kansas.....	May 31	1,454,829	17.8	293,349	20.16
Western Division:					
Montana <i>b</i>.....	.....	111,844	.8	12,753	11.40
Wyoming <i>b</i>	Oct. —	85,000	.9	10,025	11.79
Colorado.....	June 30	293,361	2.8	36,305	12.38
New Mexico <i>f</i>.....	.....	119,565	1.0	23,352	19.53
Arizona.....	June 30	87,893	.8	11,008	12.52
Utah.....	June 30	184,345	2.2	39,678	21.52
Nevada.....	Aug. 31	57,775	.5	6,898	11.94
Idaho.....	Sept. —	99,138	1.2	14,897	16.03
Washington <i>b</i>.....	.....	169,235	2.5	30,034	17.75
Oregon.....	Mar. 7	255,686	2.7	47,039	18.40
California.....	June 30	1,090,778	7.0	172,912	15.85
Alaska.....	June 30	g 40,000	.1	8,000	20.00
SUMMARY.					
North Atlantic Division.....	.....	16,030,882	98.9	2,716,660	16.95
South Atlantic Division.....	.....	8,822,962	32.8	1,887,029	21.39
South Central Division.....	.....	11,125,005	20.6	2,466,559	22.16
North Central Division.....	.....	20,933,161	27.8	4,072,426	19.45
Western Division.....	.....	2,554,620	2.2	404,901	15.85
United States <i>h</i>.....	.....	59,470,630	20.5	11,547,575	19.42

a Where the return is for 1887-88 the population is given for 1887; if the return is for 1886-87 the population is given for 1886—in each case at or near the beginning of the school year reported.

b These statistics are for 1886-87.

c These statistics are for 1885-86.

d These statistics are for 1887.

e Governor's estimate.

f These statistics are for 1880.

g General agent's estimate.

h Excluding Alaska.

SCHOOL AGE AND SCHOOL CENSUS.

There has been no change in the school age of any of the States or Territories during the year for which the returns are tabulated.

Thirty-seven States and Territories show an average increase of 2.20 per cent. in the school population. This is probably less than it should be. Ohio, Indiana, and Oregon all report a decrease of school population, when there is every reason to suppose that in such rapidly growing States there has actually been an increase. State Superintendent McElroy, of Oregon, attributes the apparent decrease in that State to the effect of a new law, under which duplicate enumerations are avoided, and therefore a more correct census is taken.

TABLE 2.—*Legal School Ages for various purposes, and School Censuses, mainly for 1887-88, compared with those for the preceding year.*

State or Territory.	School Age.			School Census.			
	For Free Attendance.	For Compulsory Attendance.	For Distribution of Funds.	Between What Ages Enumerated.	Number Enumerated.	Increase or Decrease Since Preceding Year.	Increase or Decrease, Per Cent.
1	2	3	4	5	6	7	8
North Atlantic Division:							<i>Per cent.</i>
Maine.....	4-21	6-16	4-21	4-21	211,950	D.....594	D......23
New Hampshire.....	5-21	8-14	5-21	5-21	(a)		
Vermont.....	5-20	8-14	5-20	.....	(b)		
Massachusetts.....	No limit.	8-14	5-15	5-15	359,504	I.....6,452	I.....1.83
Rhode Island.....	5 upward.	7-15	5-15	5-15	64,395	I.....1,196	I.....1.89
Connecticut.....	4-16	d3-16	4-16	4-16	154,932	I.....1,672	I.....1.09
New York.....	5-21	8-14	.....	5-21	1,772,958	I.....9,843	I......56
New Jersey <i>e</i>	5-18	7-12	5-18	5-18	374,011	I.....9,846	I.....2.70
Pennsylvania.....	6-21	0	.....	.....	(b)		
South Atlantic Division:							
Delaware <i>f</i>	6-21	0	6-21	6-21	43,538		
Maryland.....	6-21	0	5-20	5-20	(b)		
District of Columbia.....	c6-17	0	.....	c6-17	51,500	I.....61,183	I.....h2.85
Virginia.....	5-21	0	5-21	5-21	4610,271	I.....611,303	I.....h1.89
West Virginia.....	6-21	0	6-21	6-21	256,350	I.....7,172	I.....2.83
North Carolina.....	6-21	0	6-21	6-21	580,819	I.....14,549	I.....2.57
South Carolina.....	6-18	0	.....	.....	(b)		
Georgia <i>f</i>	6-18	0	6-18	6-18	560,281	I.....98,943	I.....h1.62
Florida.....	6-21	0	6-21	6-21	(a)		
South Central Division:							
Kentucky <i>e</i>	6-20	0	6-20	6-20	641,638	I.....17,391	I.....2.79
Tennessee <i>e</i>	6-21	0	6-21	6-21	640,014	I.....16,564	I.....2.66
Alabama.....	7-21	0	7-21	7-21	485,551	I.....32,614	I.....7.20
Mississippi.....	5-21	0	5-21	5-21	471,832	I.....21,352	I.....4.74
Louisiana.....	6-18	0	6-18	6-18	335,603		
Texas.....	8-16	0	8-16	8-16	528,110	I.....20,232	I.....3.98
Arkansas.....	6-21	0	6-21	6-21	883,165	I.....13,398	I.....3.58
North Central Division:							
Ohio.....	6-21	8-14	6-21	6-21	1,097,845	D.....5,376	D......49
Indiana.....	6-21	0	6-21	6-21	756,989	D.....3,540	D......46
Illinois.....	6-21	8-14	0-21	6-21	1,118,472	I.....22,068	I.....2.01
Michigan <i>e</i>	5 upward.	8-14	5-20	5-20	619,979	I.....16,212	I.....2.69
Wisconsin.....	4-20	7-15	4-20	4-20	567,702	I.....12,878	I.....2.32
Minnesota.....	5-21	8-16	5-21	5-21	6416,550	I.....18,870	I.....4.74
Iowa.....	5-21	0	5-21	5-21	639,248	I.....1,941	I......30
Missouri.....	6-20	0	6-20	6-20	838,812	I.....15,340	I.....1.86
Dakota.....	7-20	10-14	7-20	7-20	116,129	I.....7,889	I.....6.79
Nebraska.....	5-21	8-14	5-21	5-21	298,006	I.....18,024	I.....6.44
Kansas.....	5-21	8-14	5-21	5-21	532,010	I.....5,276	I.....1.00

a Enumeration imperfect.

b No school census.

c Inclusive.

d Certain exceptions are made in the case of children employed to labor.

e These statistics are for 1886-87.

f These statistics are for 1885-86.

g Estimated.

h Average annual rate of increase since the next preceding census.

i In 1885.

j These statistics are for 1888.

k These statistics are for 1887.

TABLE 2.—*Legal School Ages for various purposes, and School Censuses, mainly for 1887-88, compared with those for the preceding year—Continued.*

State or Territory.	School Age.			School Census.			
	For Free Attendance.	For Compulsory Attendance.	For Distribution of Funds.	Between What Ages Enumerated.	Number Enumerated.	Increase or Decrease Since Preceding Year.	Increase or Decrease, Per Cent.
1	2	3	4	5	6	7	8
Western Division:							<i>Per cent.</i>
Montana <i>a</i>	4-21	8-14	4-21	4-21	23,165	I.....2,972	I.....14.72
Wyoming.....	7-21	7-16			(b)		
Colorado.....	6-21	0	6-21	6-21	76,445	I.....11,347	I.....17.43
New Mexico.....	5-20	5-20	5-20	5-20	(b)		
Arizona.....	6-18	0	6-18	6-18	10,303		
Utah.....	6-18	0		6-18	53,953	I.....860	I.....1.62
Nevada.....	6-18	8-14	6-18	6-18	9,748	D.....80	D......81
Idaho.....	5-21	8-14	5-21	5-21	20,130	I.....1,575	I.....8.49
Washington <i>a</i>	5-21	8-16		6-21	47,431		
Oregon.....	4-20	0	4-20	4-20	86,574	D.....643	D......74
California.....	6-21	8-14	5-17	5-17	270,503	I.....c16,585	I.....c6.53
Alaska.....	No limit.	6-14			(d)		
SUMMARY.							
North Atlantic Division.....							I.....e.98
South Atlantic Division.....							I.....e2.14
South Central Division.....							I.....e4.01
North Central Division.....							I.....1.59
Western Division.....							I.....e6.82
United States.....							I.....e2.20

a These statistics are for 1886-87.*b* No school census.*c* Excluding the county of San Francisco.*d* It is estimated that there are 12,000 persons under twenty-one years of age.*e* Only those States for which the increase or decrease is tabulated enter into this summary.

ENROLMENT.

The total number of pupils enrolled is reported at 11,952,204, and the annual increase 234,776, showing a growth of two per cent. per annum.

Here, also, as in the case of school population, there are probably some deficient reports; Indiana and Iowa both show a heavy decrease, 6.92 per cent. in the former case and 2.27 in the latter. On the other hand, in some States, as in Minnesota and Nebraska, there appears to be an abnormal increase.

Still, after taking all these circumstances into consideration, there seems no reason to doubt that the relative increase of school population and enrolment for the United States (2.20 and 2 per cent. respectively) is substantially as given in the tables, *i. e.*, that the school enrolment is not increasing as fast as the school population; this is apparent again from the footing of Column 5, where it is seen that 20.10 per cent. of the total population are enrolled in the public schools, as against 20.33 per cent. given in the Report of this Office for 1886-87.

It will be instructive to compare these conclusions with the results deduced from the tables given on pp. 90-92 of the Report just referred to. It was there shown that during the ten-year period ending with 1887 there had been a decrease in the population of children enrolled in the public schools in all except the South Atlantic and South Central Divisions. It would seem now that the growth of the public school system in the Southern States has nearly attained its maximum, after having reached a point in its development considerably below that occupied by the Northern States, as will appear from the summaries of Column 6 of the following table. The statistics of one year, however, can-

not be relied upon to furnish a final determination upon this point, but need further confirmation. It is certain, however, that the public schools of the South are not growing at the rate they were during the ten years referred to.

It would be desirable to know if the falling-off in the public school enrolment were compensated by the increase in private school enrolment. On this point private school statistics are too meagre to furnish definite information.

In fourteen States and Territories the average increase of the private school enrolment was 6.98 per cent. (Table 8, Column 6), a quantity much larger than the public school increase in the same States.

The most complete and trustworthy data upon this head, however, are furnished by a group of States comprising Massachusetts, Rhode Island, Connecticut, New York, and New Jersey. In these five States the school population increased 1.03 per cent. during the last year reported, while the public school enrolment increased only 0.28 per cent., the actual increase being 4,938. But in the same States there was an increase in the private school enrolment of 12,956. If these were added to the increase of public school pupils, there would result a total increase of pupils attending some kind of school of 17,894, or 1 per cent., which is nearly equal to the increase of school population. It may be said, therefore, that in these five States the proportional number of children attending some school, public or private, has not perceptibly decreased.

The conclusion presents itself, then, that in these States, and presumably elsewhere, there is going on a transfer of pupils from the public to private schools. This circumstance is of the greatest significance and demands careful consideration. The public schools are supplied with better teachers and better material appliances for education than ever before, and more money is expended upon them. The cause of their retrograde movement in the older States of the North, if such exists, is to be sought for in connection with conditions arising from the growing complexity of our civilization and the development of ever greater extremes of wealth and poverty, but chiefly, perhaps, from the increasing prevalence of a belief in the necessity of certain forms and subjects of instruction that the public schools do not or can not give.

TABLE 3.—Enrolment in Common Schools, mainly for 1887-88, compared with same for the preceding year, with the total population, and with the population 6 to 14.

State or Territory.	Total Enrolment excluding Duplicates.	Increase or Decrease since Preceding Year.	Increase or Decrease Per Cent.	Average Number Enrolled to Each 100 of Total Population.	Average Number Enrolled to Each 100 of Population 6 to 14.
1	2	3	4	5	6
North Atlantic Division:					
Maine.....	144,180	D.....1,350	D..... .93	22.43	140.02
New Hampshire.....	61,826	I.....1,056	I.....1.74	16.77	119.59
Vermont.....	68,453	D.....2,949	D.....4.13	20.53	125.53
Massachusetts.....	358,090	I.....4,639	I.....1.31	17.83	121.20
Rhode Island.....	52,722	I.....3,215	I.....6.49	16.66	109.73
Connecticut.....	126,055	I.....261	I..... .21	18.52	118.78
New York.....	1,033,269	D.....4,543	D..... .44	18.92	114.84
New Jersey <i>a</i>	224,107	I.....1,366	I..... .61	17.11	96.79
Pennsylvania.....	941,625	I.....13,001	I.....1.40	19.17	101.62
South Atlantic Division:					
Delaware <i>b</i>	33,802			21.29	116.70
Maryland.....	176,587	I.....1,318	I..... .75	16.96	88.79
District of Columbia.....	24,550	I.....1,432	I.....4.23	16.35	94.27
Virginia.....	330,280	I.....5,096	I.....1.57	19.16	89.04
West Virginia.....	189,251	I.....9,942	I.....5.54	25.89	116.62
North Carolina.....	337,382	I.....12,163	I.....3.72	19.50	90.40
South Carolina.....	193,494	I.....18,417	I.....10.52	17.21	77.33
Georgia <i>c</i>	342,294	I.....22,570	I.....7.06	19.83	89.33
Florida <i>a</i>	82,453			23.25	104.79
South Central Division:					
Kentucky <i>a</i>	d319,022	I.....16,186	I.....5.34	19.63	78.92
Tennessee <i>a</i>	e408,945	I.....7,484	I.....f1.86	22.57	101.44
Alabama.....	267,288	I.....7,856	I.....3.03	16.92	75.97

a These statistics are for 1886-87.

b These statistics are for 1885-86.

c These statistics are for 1887.

d Highest number enrolled.

e Ten counties estimated.

f Estimated.

TABLE 3.—Enrolment in Common Schools, mainly for 1887-88, etc.—Continued.

State or Territory.	Total Enrolment ex- cluding Duplicates.	Increase or Decrease since Preceding Year.	Increase or Decrease Per Cent.	Average Number En- rolled to Each 100 of Total Population.	Average Number En- rolled to Each 100 of Population 6 to 14.
1	2	3	4	5	6
South Central Division—Continued.					
Mississippi <i>a</i>	270,744		<i>Per cent.</i>	21.49	93.97
Louisiana <i>b</i>	111,828	I...743	I...67	9.62	44.41
Texas.....	6364,744			16.33	74.15
Arkansas.....	292,754	I...14,354	I...7.62	16.69	73.59
North Central Division:					
Ohio.....	772,082	I...5,002	I...65	22.50	120.04
Indiana.....	514,463	D...38,249	D...6.92	24.32	120.59
Illinois.....	751,349	I...1,355	I...18	22.50	114.45
Michigan <i>a</i>	421,308	I...4,658	I...1.12	21.42	120.81
Wisconsin.....	332,721			20.08	102.75
Minnesota.....	287,382	I...33,522	I...13.21	22.61	124.39
Iowa.....	477,184	D...11,101	D...2.27	26.38	134.52
Missouri <i>a</i>	535,353	I...16,401	I...2.83	23.50	111.61
Dakota.....	93,826	I...4,076	I...4.54	17.09	104.44
Nebraska.....	215,839	I...21,619	I...11.13	23.70	119.72
Kansas.....	403,351	I...11,797	I...3.01	27.73	137.50
Western Division:					
Montana <i>a d</i>	13,100			11.70	102.72
Wyoming <i>a</i>	5,622	I...634	I...12.71	6.61	56.08
Colorado.....	50,745	I...7,635	I...17.71	17.30	139.77
New Mexico <i>e</i>	4,755			3.98	20.36
Arizona.....	6,617	I...683	I...11.51	7.53	60.11
Utah.....	32,988	I...432	I...1.33	17.89	83.14
Nevada.....	7,511	D...133	D...1.74	13.00	108.83
Idaho.....	10,433	I...560	I...5.67	10.52	70.04
Washington <i>a</i>	29,992			17.72	99.86
Oregon.....	52,638	D...387	D...73	20.59	111.91
California.....	207,050	I...10,143	I...5.15	18.98	119.74
Alaska.....	f1,435			3.59	17.94
SUMMARY.					
North Atlantic Division.....	3,010,237	I...14,696	I...49	18.73	110.81
South Atlantic Division.....	1,720,333	I...976,030	I...74.62	19.50	91.17
South Central Division.....	1,945,325	I...969,200	I...33.69	17.48	78.87
North Central Division.....	4,854,858	I...952,760	I...11.10	23.19	119.21
Western Division.....	421,451	I...22,090	I...5.53	16.50	104.09
United States <i>i</i>	11,952,204	I...234,776	I...2.00	20.10	103.50

a These statistics are for 1886-87.*b* These statistics are for 1887.*c* Eight cities and five counties not reporting.*d* Estimated.*e* These statistics are for 1880.*f* Including two Government contract schools.*g* An estimate embracing all the States of the group to which it belongs.*h* This summary embraces only the States tabulated above in the same column.*i* Excluding Alaska.

AVERAGE DAILY ATTENDANCE.

The latest returns of the average daily attendance of pupils throughout the United States in public schools aggregate 7,852,607, with an increase over the preceding year of 200,860, as nearly as can be ascertained, or 2.62 per cent. The increase has been estimated for eleven States and Territories, but the total probably does not exceed what it should be, unless the tabulated increase for West Virginia, Florida, or Colorado is too large. The large increase in South Carolina arises from the reopening of certain schools which were closed the preceding year. Eight States show a decrease, which is probably incorrect in some.

The fact that the increase of average daily attendance (2.62 per cent.) is greater than the increase of enrolment (two per cent.) can only be explained on the supposition that the children who do go to school attend more regularly than formerly; and, moreover, so great is this increase in regularity of attendance that it has been sufficient to neutral-

ize, or mask, the falling off in the percentage of the school population enrolled, noted in connection with the preceding table; so that while fewer different children go to the public schools, the schools are actually more largely attended than before.

This same increasing regularity of attendance was shown in the last Report of this Office (1886-87, p. 61) to have been going on since 1876. The present figures confirm the existence of this movement, and tend to establish its continued operation. The number of pupils attending on an average for every one hundred enrolled increased from 60.31 in 1876-77 to 64.13 in 1886-87, and is now (Column 7 of the following table) 65.70.

Column 8 of Table 4 gives the average number of pupils to a teacher, and is based on the number of teachers necessary to supply the schools. Nineteen States report this latter quantity, and in those States the average number of pupils to a teacher is 24.32. The fewest teachers are found in the District of Columbia, while they are most abundant in Dakota, the general rule being that there are the most teachers in the least thickly settled communities.

TABLE 4.—Average Daily Attendance in Common Schools, mainly for 1887-88; compared with the same for the preceding year, with the total population, with the population 6 to 14, with the enrolment, and with the teaching force.

State or Territory.	Average Daily Attendance.	Increase or Decrease since Preceding year.	Increase or Decrease Per Cent.	Number of Pupils in Average Daily Attendance to Each 100 of—			Average Number of Pupils in Attendance to a Teacher.
				Total Population.	Population 6 to 14.	Enrolment.	
1	2	3	4	5	6	7	8
North Atlantic Division:							
Maine.....	102,960	D.....1,556	D.....1.49	16.02	99.99	71.41	19.19
New Hampshire.....	44,878	I.....1,739	I.....4.03	12.18	86.81	72.59	.....
Vermont.....	46,061	I.....356	I......78	13.81	84.47	67.29	18.08
Massachusetts.....	264,723	I.....2,594	I......98	13.19	89.62	73.95	30.93
Rhode Island.....	33,553	I.....951	I.....2.91	10.61	69.90	63.70	39.42
Connecticut.....	81,098	I.....2,117	I.....2.68	11.92	76.42	64.34	26.03
New York.....	690,595	D.....4,985	I......80	11.55	70.09	61.03	27.35
New Jersey.....	131,867	D.....2,612	D.....1.94	10.07	56.95	53.84	.....
Pennsylvania.....	674,179	I.....4,447	I......66	13.73	72.76	71.60	.....
South Atlantic Division:							
Delaware.....	21,859	.....	.....	13.77	65.47	64.67	.....
Maryland.....	94,976	D.....1,434	D.....1.49	9.12	47.76	59.78	27.14
District of Columbia.....	26,512	I.....646	I.....2.50	12.44	71.72	76.08	40.54
Virginia.....	189,416	I.....4,896	I.....2.65	10.99	51.06	57.35	.....
West Virginia.....	122,020	I.....14,127	I.....13.09	16.64	75.19	64.47	.....
North Carolina.....	208,657	I.....12,538	I.....6.39	12.09	55.90	61.84	.....
South Carolina.....	139,557	I.....14,036	I.....11.18	12.42	55.79	72.15	.....
Georgia.....	226,290	D.....117	D......05	13.11	59.05	66.11	.....
Florida.....	51,059	I.....6,246	I.....13.94	14.40	64.89	61.02	22.03
South Central Division:							
Kentucky.....	208,476	.....	.....	12.83	51.58	65.25	.....
Tennessee.....	290,883	D.....7809	D......28	16.06	72.15	71.13	.....
Alabama.....	170,896	I.....8,390	I.....5.16	19.82	48.57	63.94	.....
Mississippi.....	163,854	.....	.....	10.01	56.88	60.52	.....
Louisiana.....	80,107	I.....1,522	I.....1.94	6.89	31.81	71.03	.....
Texas.....	256,922	.....	.....	12.84	58.33	78.07	.....
Arkansas.....	132,800	I.....9,400	I.....7.62	10.93	48.20	65.50	.....
North Central Division:							
Ohio.....	529,719	I.....10,609	I.....2.64	15.72	82.36	68.61	.....
Indiana.....	408,775	I.....29,947	I.....7.91	19.32	95.82	79.46	.....
Illinois.....	518,043	I.....11,846	I.....2.34	15.52	78.91	68.05	.....
Michigan.....	256,000	.....	.....	13.53	76.28	63.14	26.08
Wisconsin.....	210,000	.....	.....	12.68	64.83	63.12	25.04
Minnesota.....	123,458	I.....1,635	I.....1.31	9.95	54.74	44.91	18.13
Iowa.....	251,070	D.....3,359	D.....1.14	16.09	82.05	61.00	18.82
Missouri.....	378,572	I.....4,263	I.....1.14	15.20	72.18	64.67	32.21
Dakota.....	53,211	.....	.....	9.69	59.23	56.71	12.02
Nebraska.....	120,623	I.....7,623	I.....6.25	14.23	71.85	60.04	18.73
Kansas.....	245,881	I.....14,497	I.....6.27	16.90	83.82	60.03	23.34
Western Division:							
Montana.....	8,200	.....	.....	7.33	64.30	62.59	.....
Wyoming.....	3,756	I.....450	I.....13.64	4.41	37.40	66.70	.....

a These statistics are for 1886-87.

b These statistics are for 1885-86.

c Approximately.

d These statistics are for 1887.

e Sixteen counties estimated.

f Estimated.

TABLE 4.—Average Daily Attendance in Common Schools, mainly for 1887-88, etc.—Cont'd.

State or Territory.	Average Daily Attendance.	Increase or Decrease since Preceding Year.	Increase or Decrease Per Cent.	Number of Pupils in Average Daily Attendance to Each 100 of—			Average Number of Pupils in Attendance to a Teacher.
				Total Population.	Population 6 to 14.	Enrolment.	
1	2	3	4	5	6	7	8
Western Division—Cont'd.							
Colorado	31,516	I...4,273	<i>Per cent.</i> I...15.68	10.74	86.81	62.11	23.95
New Mexico <i>a</i>	3,150	.....	.....	2.63	13.49	66.25	.....
Arizona	3,849	.....	.....	4.38	34.96	58.17	.....
Utah	19,689	I...577	I...3.02	10.68	49.62	59.69	.....
Nevada	5,149	D...750	D...12.71	8.91	74.65	68.55	22.68
Idaho <i>b</i>	6,400	I...350	I...5.80	6.46	42.96	61.30	.....
Washington <i>c</i>	21,604	.....	.....	12.76	71.93	72.03	.....
Oregon	35,473	D...1,933	D...5.17	13.87	75.41	67.39	.....
California	132,227	I...2,930	I...2.27	12.12	76.47	63.86	.....
Alaska	533	.....	.....	1.33	6.66	37.14	.....
SUMMARY.							
North Atlantic Division	2,069,944	I...12,990	I... .65	12.54	73.99	66.77	<i>d</i> 26.50
South Atlantic Division	1,080,346	I...52,000	I...5.06	12.25	57.25	62.80	<i>f</i> 25.70
South Central Division	1,333,948	I...36,500	I...2.81	11.99	54.08	68.57	.....
North Central Division	3,157,362	I...92,560	I...3.02	15.08	77.53	65.03	<i>f</i> 22.87
Western Division	271,007	I...6,810	I...2.58	10.61	66.93	64.30	<i>f</i> 26.28
United States <i>g</i>	7,852,607	I...200,860	I...2.62	13.20	68.00	65.70	<i>f</i> 24.32

a These statistics are for 1880.*b* Estimated.*c* These statistics are for 1886-87.*d* Sixteen counties estimated.*e* An estimate embracing all the States of the group to which it belongs.*f* Only the States tabulated above are represented in this summary.*g* Excluding Alaska.

TOTAL ATTENDANCE; DURATION OF SCHOOLS.

The aggregate number of days attended by all pupils appears in Column 2 of the following table.

This is a fundamental quantity, which should be obtained directly from teachers' reports by a continued process of summing up, and not by operating upon any other quantities. It forms the basis of the most important statistical inquiries relating to attendance.

Reports apparently trustworthy and complete of the aggregate attendance in days have been received from twelve States. From these it has been computed that the aggregate schooling given in those States was sufficient to have given every child six to fourteen years of age 103.5 days. Of course the introduction of reports from other States would change this average. The average number of days' attendance of each pupil enrolled was 93.7 days, in the same States.

The average number of days the public schools were kept, so far as reported, was 129 days (Column 5). In this computation those States were omitted in which the average duration of all the schools was not reported or could not be computed. Each State, as in all averages of this character, was given a weight proportionate to its number of schools. The result embraces thirty-eight States and Territories.

The increase or decrease in the length of time the public schools were kept (Column 6) has been ascertainable in thirty-two States and Territories. Some States have lengthened their school term, others shortened it, in some cases to a considerable extent. The general resultant of all these movements, however, has been an advance of seven-tenths of a day for all the States entering into the inquiry.

It is known that the methods used in computing the average length of the school term are not uniform, and that in some of the States erroneous results are obtained. For these reasons the statistics relating to the length of the public school term are not entitled to the credit that appears to attach to them. It can only be said that we have reached a more or less close approximation of the number of days the public schools were kept, and that there has probably been no material change during the past year.

TABLE 5.—*Total Attendance in Days upon Common Schools, mainly for 1887-88, compared with the population 6 to 14, and with the enrolment; Average length of public school year in days, mainly for 1887-88, compared with same for preceding year.*

State or Territory.	Aggregate Attendance in Days.	The Total Attendance is Equivalent to an Attendance of Each Person 6 to 14 for—	Average Number of Days' Attendance of Each Pupil Enrolled.	Average Number of Days the Public Schools were Kept.	Increase or Decrease.
1	2	3	4	5	6
North Atlantic Division:	<i>Days.</i>	<i>Days.</i>	<i>Days.</i>	<i>Days.</i>	<i>Days.</i>
Maine.....				112	0
New Hampshire.....				112	
Vermont.....	6,310,409	115.7	92.2	137	D....2
Massachusetts.....	44,738,187	151.5	125.0	169	0
Rhode Island.....	6,527,440	135.9	123.8	191	I....1
Connecticut.....				179.08	D....1.1
New York.....	115,317,080	123.1	111.6	180	I....1
New Jersey a.....				190	D....2
Pennsylvania.....				149.6	D....5.4
South Atlantic Division:					
Delaware.....					
Maryland.....				190	0
District of Columbia.....	4,856,650	131.4	139.4	183	0
Virginia.....	22,542,884	60.8	68.3	119	D....1
West Virginia.....				102	D....5
North Carolina.....				63.4	I....3.4
South Carolina.....				72	0
Georgia.....				165	
Florida.....				130.3	I....7.3
South Central Division:					
Kentucky a.....				95	
Tennessee a.....				77	D....3
Alabama.....				79.5	
Mississippi a.....	13,848,576	48.1	51.1	84	
Louisiana c.....				89.4	D....2
Texas.....				116.2	I....14.6
Arkansas.....					
North Central Division:					
Ohio a.....				150	D....11
Indiana.....				133	I....2
Illinois.....	79,416,048	121.0	105.7	153.3	
Michigan a.....				153	I....9
Wisconsin.....	20,373,009	93.8	91.3		
Minnesota.....	15,429,096	66.8	53.7	122	I....4
Iowa.....				154	I....6
Missouri d.....	44,412,944	81.7	75.9	105	I....3
Dakota.....				106	D....3
Nebraska.....				137	I....7
Kansas.....				124	I....10
Western Division:					
Montana a.....				115	I....1
Wyoming.....					
Colorado.....					
New Mexico.....					
Arizona.....				135	I....15
Utah.....				125.25	D....6.75
Nevada.....				187	
Idaho.....					
Washington.....					
Oregon.....				109	I....9.8
California.....	20,098,504	116.3	97.1	152	D....3.2
Alaska.....					
SUMMARY.					
North Atlantic Division e.....		133.2	114.3	156.8	D....2.2
South Atlantic Division e.....		67.2	75.0	95.3	I....3
South Central Division e.....		48.1	51.1	83.5	I....2.9
North Central Division e.....		97.7	86.7	137.1	I....2.6
Western Division e.....		116.3	97.1	139.3	D....1
United States e.....		103.5	93.7	129.0	I....7

a These statistics are for 1886-87.

b These statistics are for 1888.

c These statistics are for 1887.

d White schools.

e These summaries embrace only the States tabulated in the corresponding columns above.

NUMBER OF SCHOOL BUILDINGS; SEATING CAPACITY.

The number of school buildings in the different States is given in Column 2. Where the number of buildings has not been reported the number of schools is substituted, and in one case the number of districts, as affording the best approximation that could be obtained. The aggregate for the United States is 219,963.

The total number of sittings is reported from thirteen States. The average number in these States to each one hundred pupils enrolled is 118, to each one hundred in average attendance 187, and to each school building 66.

The District of Columbia shows the greatest deficiency in school accommodations, though a considerable increase over last year.

TABLE 6.—*Number of School Buildings and of Sitzings, mainly for 1887-88, compared with the same for preceding year; and the number of Sitzings compared with the enrolment, average attendance, and number of school buildings.*

State or Territory.	Number of School Buildings.	Increase or Decrease since Preceding Year.	Total Number of Sitzings.	Increase or Decrease since Preceding Year.	Average Number of Sitzings to—		
					Each 100 Pupils Enrolled.	Each 100 Pupils in Average Attendance.	Each School Building.
1	2	3	4	5	6	7	8
North Atlantic Division:							
Maine.....	4,337	I.....27	a260,000	.....	a180	a253	a60
New Hampshire.....	2,131	I.....85	.....	.....	.....	.....	.....
Vermont.....	a2,500	.....	a100,000	.....	.....	.....	.....
Massachusetts ^b	c6,836	I.....119	.....	.....	.....	.....	.....
Rhode Island.....	469	I.....4	51,262	I...4,755	97	153	109
Connecticut.....	1,660	I.....5	129,180	D.....164	102	159	78
New York.....	11,965	D.....1	.....	.....	.....	.....	.....
New Jersey ^b	1,610	I.....7	205,835	I...6,934	92	156	128
Pennsylvania.....	c21,342	I.....280	.....	.....	.....	.....	.....
South Atlantic Division:							
Delaware.....	c d562	.....	.....	.....	.....	.....	.....
Maryland.....	2,004	.....	.....	.....	.....	.....	.....
District of Columbia.....	90	I.....11	30,650	I...2,487	88	116	341
Virginia.....	6,205	I.....50	372,300	I...18,100	113	197	60
West Virginia.....	4,567	D.....20	.....	.....	.....	.....	.....
North Carolina.....	5,545	D.....115	.....	.....	.....	.....	.....
South Carolina.....	3,280	.....	.....	.....	.....	.....	.....
Georgia ^e	c f7,796	I.....411	.....	.....	.....	.....	.....
Florida.....	c g1,724	.....	.....	.....	.....	.....	.....
South Central Division:							
Kentucky ^b	7,017	.....	.....	.....	.....	.....	.....
Tennessee ^b	h5,964	.....	.....	.....	.....	.....	.....
Alabama.....	c5,792	.....	.....	.....	.....	.....	.....
Mississippi.....	a b5,500	.....	.....	.....	.....	.....	.....
Louisiana.....	c1,985	I.....62	.....	.....	.....	.....	.....
Texas.....	3,498	.....	.....	.....	.....	.....	.....
Arkansas.....	2,452	.....	.....	.....	.....	.....	.....
North Central Division:							
Ohio.....	12,715	I.....126	.....	.....	.....	.....	.....
Indiana.....	9,832	D.....260	.....	.....	.....	.....	.....
Illinois.....	i12,208	I.....34	.....	.....	.....	.....	.....
Michigan ^b	7,318	I.....83	534,735	I...15,919	127	201	73
Wisconsin.....	6,184	.....	412,205	.....	124	a196	67
Minnesota.....	j5,471	I.....110	.....	.....	.....	.....	.....
Iowa.....	12,752	.....	.....	.....	.....	.....	.....
Missouri ^b	9,660	I.....394	631,286	I...12,017	108	167	65
Dakota.....	4,102	I.....283	140,466	I...20,210	150	264	34
Nebraska.....	5,187	I.....597	.....	.....	.....	.....	.....
Kansas.....	8,196	I.....836	.....	.....	.....	.....	.....
Western Division:							
Montana ^b	287	I.....27	.....	.....	.....	.....	.....
Wyoming ^b	124	I.....13	.....	.....	.....	.....	.....

a Estimated.

b These statistics are for 1886-87.

c Number of "schools."

d In 1885-86.

e These statistics are for 1887.

f Including schools under local laws.

g In 1884-85.

h Four counties estimated.

i In Illinois this is also reckoned as the number of schools.

j Number of school districts.

TABLE 6.—*Number of School Buildings and of Sitings, mainly for 1887-88, etc.—Cont'd.*

State or Territory.	Number of School Buildings.	Increase or Decrease since Preceding Year.	Total Number of Sitings.	Increase or Decrease since Preceding Year.	Average Number of Sitings to—		
					Each 100 Pupils Enrolled.	Each 100 Pupils in Average Attendance.	Each School Building.
1	2	3	4	5	6	7	8
Western Division—Cont'd.							
Colorado.....	820	I.....131	52,697	I...7,426	104	167	64
New Mexico.....	46	.....	5,580	.....	117	177	121
Arizona.....	151	.....	.....	.....	.....	.....	.....
Utah.....	440	.....	.....	.....	.....	.....	.....
Nevada.....	152	I.....7	.....	.....	.....	.....	.....
Idaho.....	268	I.....30	.....	.....	.....	.....	.....
Washington.....	863	.....	.....	.....	.....	.....	.....
Oregon.....	1,384	I.....50	.....	.....	.....	.....	.....
California.....	64,002	I.....247	.....	.....	.....	.....	.....
Alaska.....	21	.....	.....	.....	.....	.....	.....
SUMMARY.							
North Atlantic Division.....	52,850	.....	.....	.....	118	155	80
South Atlantic Division.....	31,773	.....	.....	.....	110	187	61
South Central Division.....	32,208	.....	.....	.....	.....	.....	.....
North Central Division.....	93,675	.....	.....	.....	120	139	63
Western Division.....	8,557	.....	.....	.....	105	168	67
United States.....	219,033	.....	.....	.....	115	157	66

a These statistics are for 1880.*b* Number of "schools."*c* These statistics are for 1886-87.*d* These summaries embrace only the States tabulated in the same columns above.*e* Excluding Alaska.

HIGH SCHOOLS.

It will be seen from the accompanying table that the statistics of public secondary education are very incomplete, and, moreover, lack uniformity. This is perhaps an unavoidable defect. What a "high school" pupil is admits of no precise definition. Hence the incongruity of such returns as are given from Mississippi and Louisiana. The abnormal increase in the high school enrolment of Minnesota is probably due to incorrect returns.

In seventeen States the high school enrolment forms 3.5 per cent. of the total public school enrolment; or, in other words, thirty-five pupils out of every thousand are high school pupils. The greatest development of public secondary education has apparently taken place in the North Atlantic group of States, since five of these States show an average of sixty-four pupils, out of every thousand, receiving a public high school education.

TABLE 7.—*Number of Pupils in Public High Schools, mainly for 1887-88, compared with the same for preceding year and with the total public school enrolment.*

State or Territory.	High School Enrolment.			
	High School Enrolment.	Increase or Decrease since Preceding Year.	Increase or Decrease Per Cent.	Ratio to Total Enrolment.
1	2	3	4	5
North Atlantic Division:			<i>Per cent.</i>	<i>Per cent.</i>
Maine.....	13,246			9.19
New Hampshire.....	3,860			6.35
Vermont.....	2,367			3.46
Massachusetts.....	22,785	1.....379	1.....1.69	6.66
Rhode Island.....	1,485	1.....50	1.....3.45	2.82
Connecticut.....				
New York.....				
New Jersey.....				
Pennsylvania.....				
South Atlantic Division:				
Delaware.....				
Maryland.....				
District of Columbia.....	1,353	1.....255	1.....23.12	3.90
Virginia.....				
West Virginia.....				
North Carolina.....				
South Carolina.....				
Georgia.....				
Florida.....				
South Central Division:				
Kentucky.....				
Tennessee.....				
Alabama.....				
Mississippi.....	612,000			64.43
Louisiana.....	329			.29
Texas.....				
Arkansas.....				
North Central Division:				
Ohio.....	33,754	1.....826	1.....2.51	4.37
Indiana.....	15,323	1.....811	1.....5.59	2.04
Illinois.....				
Michigan.....	9,707			2.92
Wisconsin.....	4,961	1.....1,332	1.....38.61	1.73
Minnesota.....				
Iowa.....				
Missouri.....				
Dakota.....				
Nebraska.....	5,404			2.50
Kansas.....				
Western Division:				
Montana.....	75			.57
Wyoming.....				

a These statistics are for 1885-87.

b Estimated.

c These statistics are for 1887.

d Approximately.

TABLE 7.—Number of Pupils in Public High Schools, mainly for 1887-88, etc—Cont'd.

State or Territory.	High School Enrolment.			
	High School Enrolment.	Increase or Decrease since Preceding Year.	Increase or Decrease Per Cent.	Ratio to Total Enrolment.
1	2	3	4	5
Western Division—Continued.				
Colorado.....	1,153	I.....23	<i>Per cent.</i> I.....2.04	<i>Per cent.</i> 2.27
New Mexico				
Arizona.....	60			91
Utah.....				
Nevada.....				
Idaho.....				
Washington.....				
Oregon				
California.....	2,938	D.....367	D.....11.10	1.42
Alaska.....				
SUMMARY.				
North Atlantic Division <i>b</i>			I.....1.80	6.39
South Atlantic Division <i>b</i>			I.....23.12	3.90
South Central Division <i>b</i>				3.22
North Central Division <i>b</i>			I.....5.92	2.93
Western Division <i>b</i>			D.....7.76	1.52
United States <i>b</i>			I.....4.18	3.50

^a Estimated.^b These summaries embrace only the States tabulated in the same columns above.

PRIVATE SCHOOLS.

The reports of private schools are considerably fuller this year than the preceding one. In one division, the North Atlantic, all the States but two are represented.

The increase of the private school enrolment, compared with that of the public schools, has already been referred to (p. 83).

Column 5 gives the proportion of pupils who attend private schools. In 20 States and Territories 9.38 per cent. of all pupils, on an average, or nearly one-tenth, are private school pupils. It will be observed that, so far as known, private schools have received a greater development in the Northern States than in the Southern, and in the older States than in the newer.

The necessity of securing statistics of private schools continues to receive attention. State Superintendent Thayer of Wisconsin says upon this point: "Until all institutions of every grade that engage in the instruction of persons of school age in the State are required by stringent legislation to report annually at least the number thus instructed, it will be impossible to ascertain with accuracy the proportion of our school population which is failing to secure an elementary education. Every person or association of persons receiving pupils between the ages of four and twenty years for instruction should be required to register the name, age, days of attendance, and studies pursued by each pupil, if a resident of the State, and annually furnish an abstract of the record thus taken."

TABLE 3.—*Number of Pupils Enrolled in Private Schools, mainly for 1887-88, compared with the same for preceding year and with the total number of pupils; also the total number of pupils of all kinds compared with the population 6 to 14.*

State or Territory.	Estimated Private School Enrolment.	Increase or Decrease since Preceding Year.	Increase or Decrease, Per Cent.	Ratio of Private School Enrolment to Total Public and Private School Enrolment.	Average Number Enrolled in Public and Private Schools to Each 100 Persons 6 to 14.
1	2	3	4	5	6
North Atlantic Division:			<i>Per cent.</i>	<i>Per cent.</i>	
Maine.....					
New Hampshire.....	7,652	I...1,214	I...18.86	11.01	134.39
Vermont.....	6,972	D...534	D...7.11	9.24	138.21
Massachusetts.....	30,090	I...1,149	I...3.97	7.75	131.39
Rhode Island.....	8,886	I...289	I...3.33	14.42	123.23
Connecticut.....	17,179	I...1,226	I...7.69	11.99	135.00
New York.....	142,240	I...9,189	I...6.91	12.10	130.65
New Jersey.....	37,330	I...1,103	I...3.00	14.44	113.13
Pennsylvania.....					
South Atlantic Division:					
Delaware.....					
Maryland.....	15,000			7.53	96.33
District of Columbia.....	3,119			8.21	102.71
Virginia.....					
West Virginia.....					
North Carolina.....	25,000			6.90	97.09
South Carolina.....					
Georgia.....					
Florida.....	4,110				
South Central Division:					
Kentucky.....					
Tennessee.....					
Alabama.....					
Mississippi.....	618,000			56.23	5100.22
Louisiana.....	22,849				
Texas.....					
Arkansas.....					
North Central Division:					
Ohio.....					
Indiana.....					
Illinois.....	100,465	I...12,640	I...14.39	11.79	129.76
Michigan.....	32,697	I...3,106	I...10.53	7.18	130.16
Wisconsin.....	10,000			2.92	105.84
Minnesota.....					
Iowa.....					
Missouri.....					
Dakota.....	1,500	I...710	I...89.87	1.57	105.11
Nebraska.....					
Kansas.....					
Western Division:					
Montana.....	457	I...99	I...27.65	3.37	106.30
Wyoming.....					
Colorado.....	847	D...1,095	D...56.25	1.64	142.17
New Mexico.....					
Arizona.....	300			4.34	62.83
Utah.....	66,975				
Nevada.....					
Idaho.....					
Washington.....					
Oregon.....	4,618	D...316	D...6.40	8.07	121.72
California.....	20,763	D...1,893	D...8.35	9.12	131.75
Alaska.....	7382			21.02	22.71
SUMMARY.					
North Atlantic Division <i>g</i>			I...5.75	11.53	128.94
South Atlantic Division <i>g</i>				7.28	97.19
South Central Division <i>g</i>				56.23	5100.22
North Central Division <i>g</i>			I...13.93	8.29	122.91
Western Division <i>g</i>			D...10.72	7.56	127.54
United States <i>g h</i>			I...6.98	9.38	120.40

a These returns are for 1886-87.

b Approximately.

c These statistics are for 1887.

d Returns incomplete.

e 79 schools reporting out of 89.

f Including Seal Island schools (enrolment 82).

g These summaries embrace only the States tabulated in the same columns above.

h Excluding Alaska.

TABLE 9.—Whole Number of Different Teachers, classified by sex, mainly for 1887-88, compared with the same for preceding year; number of teachers necessary to supply the schools, compared with same for preceding year; changes in the teaching force; proportion of teachers who are males.

State or Territory.	Whole Number of Male Teachers.	Increase or Decrease since Preceding Year.	Per Cent.	Whole Number of Female Teachers.	Increase or Decrease since Preceding Year.	Per Cent.	Whole Number of Both Sexes.	Increase or Decrease since Preceding Year.	Number Necessary to Supply the Schools.	Increase or Decrease since Preceding Year.	Per cent.	Ratio of Male Teachers to Whole Number of Teachers.
1	2	3	4	5	6	7	8	9	10	11	12	13
North Atlantic Division:												
Maine.....	61,485	D.....52	D.....14.15	66,113	I.....233	I.....13.28	7,598	I.....271	5,355		41.62	619.54
New Hampshire.....	313	D.....52	D.....14.15	2,756	D.....127	D.....4.55	3,072	D.....503	2,547	0	56.89	10.39
Vermont.....	479	D.....23	D.....2.23	3,517	D.....194	I.....2.20	3,995	D.....168	8,559	I.....21	15.63	10.21
Massachusetts.....	1,010	D.....23	D.....10.53	8,887	I.....48	I.....4.20	9,897	I.....28	3,115		21.20	12.71
Rhode Island.....	170	D.....28	D.....4.99	1,168	I.....82	I.....3.31	1,338	I.....54	24,052		37.63	17.34
Connecticut.....	6,533	D.....179	D.....2.92	62,559	I.....578	I.....2.27	63,092	I.....408				17.81
New York.....	5,651	D.....11	D.....1.12	26,075	I.....108	I.....3.52	31,726	I.....107				30.61
New Jersey.....	835	D.....132	D.....1.41	3,177	D.....9	D......06	4,002	D.....141				38.92
Pennsylvania.....	9,063	D.....132	D.....1.41	14,673	D.....9	D......06	23,681	D.....141				35.00
South Atlantic Division:												
Delaware.....	6222	I.....3	I......26	6413	I.....114	I.....4.72	635	I.....117	63,300		64.90	31.02
Maryland.....	1,138	I.....9	I.....12.68	3,574	I.....25	I.....4.55	3,654	I.....34	651	I.....31	0	12.33
District of Columbia.....	80	D.....68	D.....1.98	3,911	I.....189	I.....5.10	7,282	I.....121				46.29
Virginia.....	3,371	I.....6	I......18	1,853	I.....126	I.....7.27	5,238	I.....132				64.53
West Virginia.....	3,380	I.....6	I.....18.98	2,657	D.....42	D.....1.56	7,107	I.....608				62.61
North Carolina.....	4,450	I.....710	I......67	1,961	I.....194	I.....10.98	4,203	I.....209				53.34
South Carolina.....	2,242	I.....15	I......67	63,300	I.....620	I.....a1.90	78,200	I.....45				651.60
Georgia.....	64,900	I.....a25	I.....a1.90	61,093	I.....12	I......29	8,509	I.....129				51.96
Florida.....	61,320	I.....117	I.....2.72	4,088	I.....14	I......58	67,496	D.....90				67.42
Kentucky.....	4,421	D.....104	D.....2.02	92,442	I.....163	I.....8.78	5,751	I.....140				64.94
Tennessee.....	65,054	D.....23	D......61	2,020	D.....257	D.....8.54	6,013	D.....802				54.23
Alabama.....	3,741	D.....605	D.....15.65	2,752	D.....36	D.....2.89	2,409	I.....31				49.73
Mississippi.....	3,261	I.....67	I.....5.92	1,211	D......36	D.....2.89	10,556	I.....497				64.24
Louisiana.....	1,198	I.....67	I.....5.92	1,211	D......36	D.....2.89	10,556	I.....497				73.56
Texas.....	46,781	I.....255	I.....8.03	1,253	I.....242	I.....24.42	4,664	I.....161				45.40
Arkansas.....	3,431	I.....255	I.....8.03	1,253	I.....242	I.....24.42	4,664	I.....161				50.01
North Central Division:												
Ohio.....	11,529	I.....600	I.....6.37	13,319	D.....529	D.....3.82	24,848	I.....196				31.50
Indiana.....	7,403	D.....11	I......45	7,099	I.....297	I.....3.00	14,202	I.....59				
Illinois.....	7,210	D.....222	D.....2.97	15,714	I.....281	I.....1.82	22,984	I.....59				

a Estimated.

b These statistics are for 1886-87.

c Winter term, 1886-87.

f Approximately.

g A few counties estimated.

h Estimated in part.

i These statistics are for 1887.

TABLE 9.—Whole Number of Different Teachers, classified by sex, mainly for 1887-88, etc.—Continued.

State or Territory.	Whole Number of Male Teachers.	Increase or Decrease since Preceding Year.	Increase or Decrease Per Cent.	Whole Number of Male Teachers.	Increase or Decrease since Preceding Year.	Increase or Decrease Per Cent.	Whole Number of Both Sexes.	Increase or Decrease since Preceding Year.	Number Necessary to Supply the Schools.	Increase or Decrease since Preceding Year.	Per cent. of Change in the Teaching Force.	Ratio of Male Teachers to Whole Number of Teachers.
1	2	3	4	5	6	7	8	9	10	11	12	13
North Central Division—Continued.												
Michigan a	3,886	D.....98	D.....2.49	11,710	I.....341	I.....3.02	15,505	I.....246	10,198	I.....414	Per cent. 52.64	24.64
Minnesota	2,453	D.....97	D.....4.90	8,990	I.....364	I.....6.86	11,443	I.....267	8,097	I.....	41.32	24.94
Iowa	1,884	D.....255	D.....4.36	19,518	I.....1,136	I.....6.18	25,113	I.....381	13,465	I.....718	8.33	21.94
Missouri a	5,505	D.....	D.....	65,988	I.....181	I.....4.78	13,296	I.....236	11,744	I.....118	62.39	22.28
Dakota	1,779	I.....55	I.....3.19	3,965	I.....1,591	I.....37.64	9,784	I.....2,597	4,426	I.....	13.21	435.00
Nebraska	2,752	I.....646	I.....30.67	7,134	I.....1,537	I.....8.92	11,310	I.....360	6,922	I.....789	29.78	30.97
Kansas	4,750	I.....323	I.....7.30	6,560	I.....23	I.....8.78	394	I.....17	10,536	I.....	42.82	27.84
Western division:												
Montana a	109	D.....6	D.....5.22	285	I.....23	I.....8.78	394	I.....17	10,536	I.....	7.35	42.00
Wyoming	57	I.....17	I.....4.93	174	I.....292	I.....27.81	231	I.....309	1,316	I.....126	29.48	27.66
Colorado	332	I.....	I.....	1,342	I.....18	I.....18.96	1,704	I.....	1,316	I.....	29.48	24.67
New Mexico c	128	I.....	I.....4.91	36	D.....2	D......65	164	I.....19	1,316	I.....	29.48	21.24
Arizona	72	I.....12	I.....3.96	113	D.....	D.....	621	I.....10	1,316	I.....	29.48	78.05
Utah a	315	I.....	I.....	306	D.....	D.....	621	I.....	1,316	I.....	29.48	38.92
Nevada	650	I.....59	I.....14.05	615	I.....72	I.....10.59	6340	I.....131	227	I.....	3.96	50.72
Idaho	479	D.....81	D.....8.81	752	I.....72	I.....10.59	1,231	I.....131	227	I.....	3.96	21.14
Washington a	833	D.....217	D.....16.65	1,253	I.....267	I.....7.45	2,091	I.....2	227	I.....	3.96	36.76
Oregon	1,086	D.....	D.....	3,852	I.....267	I.....7.45	4,938	I.....50	227	I.....	3.96	38.91
California	12	I.....2	I.....	12	I.....7	I.....	24	I.....9	227	I.....	3.96	40.08
Alaska	12	I.....2	I.....	12	I.....7	I.....	24	I.....9	227	I.....	3.96	21.99
SUMMARY.												
North Atlantic Division	19,472	D.....7514	D.....2.72	68,930	I.....d1,311	I.....e1.94	88,402	I.....d767	1,316	I.....	c31.28	22.03
South Atlantic Division	21,103	I.....d924	I.....e4.58	18,297	I.....d781	I.....e4.48	32,400	I.....d1,708	1,316	I.....	e4.04	53.56
South Central Division	27,887	D.....d387	D.....e1.37	17,521	I.....d175	I.....e1.01	45,408	D.....d212	1,316	I.....	61.41	31.72
North Central Division	5,231	I.....d1,247	I.....e2.27	105,716	I.....d5,206	I.....e5.18	161,947	I.....d6,453	1,316	I.....	c34.36	34.72
Western Division	3,621	D.....d239	D.....e6.19	8,514	I.....d811	I.....e10.53	12,135	I.....d572	1,316	I.....	e25.73	29.84
United States f	123,314	I.....d1,001	I.....d.79	218,978	I.....d8,287	I.....d3.93	347,292	I.....d9,288	1,316	I.....	c33.18	35.95

a These statistics are for 1886-87.

b Estimated.

c These statistics are for 1880.

d Estimated in part.

e Excluding States not tabulated above.

f Excluding Alaska.

TABLE 10.—Salaries of Teachers, classified by sex, mainly for 1887-88, and compared with same for preceding year.

State or Territory.	Average Monthly Salaries.			
	Males.	Increase or Decrease.	Females.	Increase or Decrease.
1	2	3	4	5
North Atlantic Division:				
Maine.....	\$33.82	\$0	\$16.92	D...\$3.78
New Hampshire.....	44.32	I...3.29	24.93	I......47
Vermont.....	37.20	I...3.40	20.92	I......04
Massachusetts.....	119.34	I...2.49	44.88	D......05
Rhode Island.....	85.99	I...3.32	44.40	I......02
Connecticut.....	73.50	I...4.68	38.52	I......02
New York.....				
New Jersey <i>a</i>	64.07	I...1.06	41.34	I......83
Pennsylvania.....	38.54	I... .02	30.16	I......30
South Atlantic Division:				
Delaware.....				
Maryland <i>b</i>				
District of Columbia.....	103.19	D...6.57	61.79	I......67
Virginia.....	31.00	D... .20	26.40	D......22
West Virginia.....				
North Carolina.....	24.57	I...1.77	21.95	D......05
South Carolina.....	26.68	D...1.39	23.80	D...1.39
Georgia.....				
Florida.....				
South Central Division:				
Kentucky.....				
Tennessee.....				
Alabama.....	24.26		23.76	
Mississippi.....				
Louisiana.....				
Texas.....				
Arkansas.....	42.50		37.50	
North Central Division:				
Ohio.....				
Indiana.....				
Illinois.....	52.98	I...1.45	43.09	I......92
Michigan <i>a</i>	45.37	I... .37	31.45	I......29
Wisconsin.....	43.94		28.91	
Minnesota.....	40.10	D... .90	30.52	I......32
Iowa.....	36.44	D...1.56	30.05	I...1.46
Missouri.....				
Dakota.....	36.25	I... .09	32.44	I...1.46
Nebraska.....	43.18	D...1.82	35.54	I......54
Kansas.....	41.01	I...1.73	33.64	I...1.12
Western Division:				
Montana <i>a</i>	75.00	D...5.00	60.00	0
Wyoming <i>a</i>	59.90	I...6.05	59.90	I...6.05
Colorado.....	76.47	I...8.91	57.47	D... .13
New Mexico.....				
Arizona.....	85.94	D...1.66	78.91	D... .69
Utah.....	52.36	I...5.51	31.57	I...4.87
Nevada.....	98.25	0	66.91	0
Idaho.....				
Washington <i>a</i>	44.86	D...1.14	35.87	I...6.87
Oregon.....	46.20	I... .42	36.97	I...2.18
California.....	79.46	D...1.29	64.55	I... .43
Alaska.....	120.00	D...11.25	90.00	I...18.00
SUMMARY.				
North Atlantic Division <i>d</i>	47.48	I... .67	31.95	D... .35
South Atlantic Division <i>d</i>	27.79	I... .35	26.77	D... .37
South Central Division <i>d</i>	32.99		28.97	
North Central Division <i>d</i>	43.64	D... .81	34.29	I... .93
Western Division <i>d</i>	63.39	I... .89	55.55	I...1.44
United States <i>d e</i>	41.75	D... .12	34.21	I... .45

a These statistics are for 1887-87.*b* Average monthly salary for both sexes is estimated at \$39.*c* Outside of cities; the average annual salary of males in cities is \$1,009, females \$192.*d* States not furnishing the necessary data are excluded from these summaries.*e* Excluding Alaska.

TABLE 11.—*Showing the Amount of School Revenues from different sources, mainly for 1887-88, and compared in part with the same for preceding year.*

State or Territory.	From Per- manent Funds and Rents.	From Taxation.				From other Sources.	Total Revenue for the Year, ex- cluding Money Borrowed.	Increase or De- crease since Pre- ceding Year.	Balance from Previous Year.	From Sale of Bonds.
		From State Taxes.	From Local Taxes.	Total from Taxes.	Increase or De- crease since Pre- ceding Year.					
1	2	3	4	5	6	7	8	9	10	11
North Atlantic Division:										
Maine.....	\$25,602	\$334,590	\$876,034	\$1,040,624	I...\$12,415	\$0	\$1,067,226	I...\$12,886	\$66,156	
New Hampshire.....	15,920	466,816	127,038	593,854	I...42,698	66,965	676,739	I...54,197		0
Vermont.....	23,996	0	525,749	525,749	I...5,331	78,412	628,157	I...20,775		0
Massachusetts.....	177,720	0	6,918,479	6,918,479	I...77,901	96,212	7,192,411	I...192,327		
Rhode Island.....	19,314	107,081	653,042	760,123	I...35,187	55,601	885,637	I...50,447	73,013	
Connecticut.....	161,212	232,398	1,293,385	1,530,783	D...24,466	57,713	1,749,708	D...43,661	0	0
New York.....	35,668	3,515,307	10,460,847	13,976,154	I...47,439	718,602	14,730,424	I...486,336	2,638,634	
New Jersey <i>a</i>	131,868	1,456,660	1,057,348	2,514,008	D...50,935	0	2,645,876	D...52,309		
Pennsylvania.....										
South Atlantic Division:										
Delaware <i>b</i>		60,607	185,994	246,601		0	246,601			
Maryland.....	50,117	512,881	1,080,157	1,593,038	I...37,316	147,647	1,790,802	I...42,981	28,802	0
District of Columbia.....		0	400,116	400,233	I...210,008	27,956	1,790,802	I...210,008		0
Virginia.....	38,983	812,784	695,374	1,508,157	I...91,249	88,449	1,573,007	I...89,199	293,972	(d)
West Virginia.....	(d)	e389,536	774,719	1,164,255		135,039	1,252,704	I...194,356	239,530	0
North Carolina.....	0	537,461	f27,500	564,961		12,308	466,620	I...12,768	192,108	0
South Carolina <i>a</i>	0	410,333	43,974	454,312		h23,047	791,836	I...21,542	91,613	0
Georgia <i>g</i>	0	489,358	h274,431	763,789	I...26,166	0	481,110	I...34,811		0
Florida.....	32,064	74,803	377,238	452,046	I...43,021					
South Central Division:										
Kentucky <i>a</i>	29,531	1,058,703	4665,874	\$1,734,577	I...150,937			I...153,231		
Tennessee <i>b</i>		f199,107	799,253	998,360		138,791	1,077,151	I...107,151		
Alabama.....	142,331	h392,516	174,183	566,693	I...199,803	3,747	712,808	I...112,808		
Mississippi <i>a</i>	63,000	330,641	612,000	912,000	D...11,294		973,000	I...108,224		
Louisiana <i>g</i>	32,694	1,705,667	320,067	456,738	D...11,477	13,374	322,805	I...5,561	88,450	
Texas <i>m</i>	832,292	0	307,545	2,012,662		170,120	8,015,014	I...113,312	296,891	
Arkansas.....	0	315,403	651,674	967,077	I...254,707	46,890	1,012,963	I...113,312		
North Central Division:										
Ohio.....	246,520	1,664,331	7,713,038	9,377,369	I...253,408	297,925	9,921,814	I...182,530	4,198,732	524,695
Indiana.....	218,119	1,875,423	1,208,237	3,083,660		344,543	3,616,122			
Illinois.....	626,823	1,000,000	8,424,725	9,424,725	I.....4,067	329,131	10,390,679	D...15,633	2,656,519	573,444

Michigan <i>a</i>	605,697	0	3,583,901	3,583,904	1...297,448	711,398	4,969,999	1...328,607	1,023,922	.....
Wisconsin.....	(d)	7739,436	2,798,117	2,537,533	.....	642,397	2,537,533	.....	979,627	.....
Minnesota.....	6113,792	418,538	2,136,684	2,575,012	.....	581,694	3,667,291	1...119,219	2,584,151	640,765
Iowa.....	791,938	0	5,383,321	6,383,921	.....	509,069	6,766,583	.....	845,691	.....
Missouri <i>a</i>	343,749	705,192	3,290,733	3,963,916	1...338,494	78,147	4,693,762	1...484,347	329,875	123,807
Dakota.....	0	0	1,708,940	1,768,940	1...492,111	.....	1,847,687	1...570,259	.....	.....
Nebraska.....	0	553,390	3,075,803	3,629,558	1...569,655	202,558	3,531,816	1...586,465	533,200	960,598
Kansas.....	0	0	288,575	288,575	1...60,242	0	288,575	1...60,242	.....	.....
Montana <i>a</i>	0	0	624,873	1,039,523	1...188,656	140,797	1,180,220	1...240,742	367,788	.....
Wyoming.....	0	411,050	140,803	147,363	1...39,440	2,349	149,652	1...324,326	8,053	.....
Colorado.....	0	6,500	56,296	160,455	D...14,843	77,216	237,672	D...7,673	55,409	.....
New Mexico.....	0	101,189	0	134,313	.....	30,419	164,733	1...4,560	.....	.....
Arizona.....	0	0	302,592	302,592	1...2,592	37,142	339,734	1...39,734	151,746	.....
Nevada.....	0	0	179,785	273,234	.....	92,776	688,254	D...81,458	113,385	0
Idaho <i>m</i>	0	0	2,429,613	4,399,233	1...780,091	15	4,601,174	1...728,324	534,798	(p)
Washington <i>a</i>	322,244	93,449	.....	.....	.....	.....	.....	.....	.....	.....
Oregon.....	201,825	1,969,720	.....	.....	.....	.....	.....	.....	.....	.....
California.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alaska.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

a These statistics are for 1886-87.*b* These statistics are for 1885-86.*c* United States appropriation.*d* Included in State taxes.*e* Including revenue from permanent funds and sales of bonds.*f* Approximate.*g* These statistics are for 1887.*h* Including balances from preceding year.*i* Including subscriptions.*j* State apportionment.*k* \$250,000 of this are appropriated from the general treasury, the remainder being a poll-tax returned to the counties where collected.*l* The funds for State normal schools come out of this revenue; some local revenues are not included.*m* So far as reported.*n* Including revenue from permanent funds.*o* Including fines, licenses, and estrays.*p* Not reported.

TABLE 12.—Showing the Amount of School Revenue derived from different sources per capita of population 6 to 14 and of average attendance, mainly for 1887-88.

State or Territory.	Revenue per Capita of Population 6 to 14.				Revenue per Capita of Average Attendance.			
	From Permanent Funds and Rents.	From State Taxes.	From Local Taxes.	From Other Sources.	From Permanent Funds and Rents.	From State Tax.	From Local Tax.	From Other Sources.
1	2	3	4	5	6	7	8	9
North Atlantic Division:								
Maine.....	\$0.26	\$3.54	\$6.57	0	\$0.26	\$3.54	\$6.57	0
New Hampshire.....	.31	9.03	2.46	\$1.30	.35	10.40	2.83	\$1.49
Vermont.....	.44	0	9.64	1.44	.52	0	11.41	1.70
Massachusetts.....	.60	0	23.42	.33	.67	0	26.14	.36
Rhode Island.....	.40	2.23	13.59	1.16	.58	3.19	19.45	1.66
Connecticut.....	1.52	2.19	12.23	.54	1.99	2.87	16.01	.71
New York.....	.04	3.91	11.63	.80	.06	5.57	16.59	1.14
New Jersey.....	.57	6.29	4.57	0	1.00	11.05	8.02	0
Pennsylvania.....								
South Atlantic Division:								
Delaware.....		2.09	6.42	0		2.78	8.50	0
Maryland.....	.25	2.58	5.43	.74	.53	5.40	11.37	1.55
District of Columbia.....	0	c10.82	10.82	0	0	c15.09	15.09	0
Virginia.....	.10	2.19	1.87	.08	.20	4.29	3.67	.12
West Virginia.....	(d)	c2.40	4.77	.55	(d)	c3.19	6.35	.75
North Carolina.....	0	1.44	.07	.36	0	2.53	.13	.65
South Carolina.....	0	1.67	.18	.05	0	3.27	.35	.10
Georgia.....	0	1.28	g.72	g.07	0	2.16	g1.21	g.12
Florida.....	.39	.91	4.53	0	a.79	a2.23	a5.73	a0
South Central Division:								
Kentucky.....	.07	2.58	h1.38	0	.13	4.91	h2.63	0
Tennessee.....		4.36	2.08	.36		i.50	2.87	.50
Alabama.....	.40	1.12	.50	.01	.83	2.30	1.02	.02
Mississippi.....	.22	1.04	2.12		.38	1.83	3.73	
Louisiana.....	.21	.54	1.27	.05	.66	1.71	4.00	.17
Texas.....	1.69	3.47	.63	.35	2.90	5.94	1.07	.59
Arkansas.....	0	1.14	2.37	.17	0	k2.38	k4.91	k.34
North Central Division:								
Ohio.....	.33	2.59	11.99	.46	.47	3.14	14.56	.56
Indiana.....	.51	4.40	2.83	.81	.53	4.59	2.96	.84
Illinois.....	.95	1.52	12.83	.50	1.21	1.93	16.26	.63
Michigan.....	1.91	0	10.28	2.04	2.50	0	13.47	2.67
Wisconsin.....	(d)	12.47	8.64	0	(d)	k13.81	k13.32	0
Minnesota.....	1.95	1.82	9.33	2.78	3.55	3.31	17.05	5.08
Iowa.....	2.24	0	15.19	1.64	2.73	0	18.52	2.00
Missouri.....	.05	1.34	6.27	.69	.91	1.86	8.69	.95
Dakota.....	0	0	19.69	.87	0	0	33.24	1.47
Nebraska.....								
Kansas.....	0	1.89	10.49	.69	0	2.25	12.51	.82
Western Division:								
Montana.....	0	0	22.63	0	0	0	35.19	0
Wyoming.....								
Colorado.....	0	11.42	i7.21	3.83	0	13.16	19.83	4.47
New Mexico.....								
Arizona.....	0	.59	12.79	.21	0	1.69	36.58	.61
Utah.....	0	2.63	1.42	1.95	0	5.29	2.86	3.92
Nevada.....								
Idaho.....	0	0	9.02	2.64	0	0	20.99	4.75
Washington.....	0	0	10.07	1.24	0	0	14.01	1.72
Oregon.....	6.85	1.99	3.82	1.97	9.08	2.63	5.07	2.62
California.....	1.17	11.39	14.05	0	1.53	14.90	18.37	0
Alaska.....								
SUMMARY.								
North Atlantic Division <i>m</i>.....	.33	3.43	12.13	.60	.44	4.60	16.26	.80
South Atlantic Division.....	.06	1.95	2.05	.23	.11	3.41	3.57	.41
South Central Division.....	.45	1.64	1.43	.15	.84	3.03	2.65	.28
North Central Division <i>m</i>.....	.86	1.80	10.13	.91	1.11	2.32	13.01	1.17
Western Division <i>m</i>	1.44	7.10	11.40	1.04	2.02	10.00	16.05	1.47
United States <i>m</i>.....	.55	2.26	6.99	.56	.81	3.34	10.33	.83

a These statistics are for 1886-87.*b* These statistics are for 1885-86.*c* United States appropriation.*d* Included in State taxes.*e* Including revenue from permanent funds and sales of bonds.*f* These statistics are for 1887.*g* Including balance from preceding year.*h* Including subscriptions.*i* State apportionment.*j* So far as reported.*k* Average attendance estimated.*l* Including revenue from permanent funds.*m* Including only the States tabulated above.

TABLE 13.—Percentage Classification of School Revenue; showing the percentage of the whole revenue derived from each source named, mainly for 1887-88.

State or Territory.	Interest on Per- manent Funds and Rent of School Lands.	State Taxes.	Local Taxes.	Other Re- venues.
1	2	3	4	5
North Atlantic Division:	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Maine.....	2.49	34.16	63.35	0
New Hampshire.....	2.35	68.98	18.77	9.90
Vermont.....	3.82	0	83.70	12.43
Massachusetts.....	2.47	0	96.19	1.34
Rhode Island.....	2.31	12.82	78.20	6.67
Connecticut.....	9.21	13.28	74.21	3.30
New York.....	.24	23.86	71.02	4.83
New Jersey <i>a</i>	4.98	55.05	39.97	0
Pennsylvania.....				
South Atlantic Division:				
Delaware <i>b</i>		24.58	75.42	0
Maryland.....	2.80	28.64	60.32	8.24
District of Columbia.....	0	50.00	50.00	0
Virginia.....	2.35	51.67	44.20	1.78
West Virginia.....	(<i>d</i>)	31.10	61.84	7.06
North Carolina.....	0	76.78	3.93	19.29
South Carolina <i>a</i>	0	87.94	9.42	2.64
Georgia <i>f</i>	0	61.80	34.66	3.54
Florida.....	6.62	15.45	77.93	0
South Central Division:				
Kentucky <i>a</i>	1.68	60.36	37.95	0
Tennessee <i>b</i>		12.91	74.20	12.89
Alabama.....	19.97	55.06	24.44	.53
Mississippi <i>a</i>	6.47	30.84	62.90	
Louisiana <i>f</i>	10.08	26.14	61.22	2.56
Texas.....	27.60	56.55	10.20	5.65
Arkansas.....	0	31.14	64.33	4.53
North Central Division:				
Ohio.....	2.48	16.77	77.74	3.01
Indiana.....	5.98	51.44	33.14	9.44
Illinois.....	6.04	9.63	81.16	3.17
Michigan <i>a</i>	13.42	0	72.24	14.34
Wisconsin.....	(<i>d</i>)	22.22	77.78	0
Minnesota.....	12.26	11.42	58.80	17.52
Iowa.....	11.75	0	79.65	8.60
Missouri <i>a</i>	7.81	15.01	70.02	7.66
Dakota.....	0	0	95.77	4.23
Nebraska.....				
Kansas.....	0	14.44	80.27	5.29
Western Division:				
Montana <i>a</i>	0	0	100.00	0
Wyoming.....				
Colorado.....	0	35.13	52.94	11.93
New Mexico.....				
Arizona.....	0	4.34	84.69	1.57
Utah.....	0	43.84	23.67	32.49
Nevada.....				
Idaho.....	0	0	81.53	18.47
Washington <i>a</i>	0	0	89.07	10.93
Oregon.....	46.82	13.55	26.12	13.49
California.....	4.39	42.81	52.80	0
Alaska.....				
SUMMARY.				
North Atlantic Division <i>k</i>	2.00	20.81	73.55	3.64
South Atlantic Division.....	1.47	45.50	47.61	5.42
South Central Division.....	12.35	44.62	38.93	4.10
North Central Division <i>k</i>	6.27	13.16	73.91	6.65
Western Division <i>k</i>	6.55	33.84	54.33	4.98
United States <i>k</i>	5.29	21.81	67.50	5.40

a These statistics are for 1886-87.*b* These statistics are for 1885-86.*c* United States appropriation.*d* Included in State taxes.*e* Including revenue from permanent funds and proceeds of bond sales.*f* These statistics are for 1887.*g* Including some balances.*h* Including subscriptions.*i* State apportionment.*j* Including revenue from permanent funds.*k* Including only the States tabulated above.

TABLE 14.—*School Expenditures, mainly for 1887-88, compared in part with those of preceding year.*

State or Territory.	2	3	4	5	6	7	8	9	10	11	12	13
	Sites, Buildings, and Furniture.	Libraries and Apparatus.	Salaries of Superintendents.	Salaries of Teachers.	Salaries of Superintendents and Teachers.	Increase or Decrease since Preceding Year.	Increase or Decrease Per Cent.	Other Expenditures.	Total Expenditure, excluding Payment of Indebtedness.	Increase or Decrease since Preceding Year.	Increase or Decrease Per Cent.	Indebtedness Paid.
1							Per cent.				Per cent.	
North Atlantic Division:												
Maine.....	\$54,600	(\$132,761)	\$33,237	\$570,000	\$773,237	1,350,044	6.46	\$331,850	\$1,238,898	D.....\$13,431	D.....1.07	.....
New Hampshire.....	58,598	.....	20,676	474,000	433,076	1,350,044	1.....	92,663	686,491	D.....71,135	D.....1.56	.....
Vermont.....	10,118	.....	483,423	483,423	483,423	1,350,044	2.35	1,028,108	690,352	I.....37,514	I.....6.13	\$21,997
Massachusetts.....	681,355	\$423,736	209,758	55,114,452	65,321,160	1,350,044	1.....	481,228	8,918,473	D.....81,054	D.....1.17	.....
Rhode Island.....	184,785	.....	13,474	519,134	537,658	1,350,044	1.....	98,036	6,918,473	I.....49,870	I.....6.43	.....
Connecticut.....	124,559	.....	31,256	1,264,061	1,265,317	1,350,044	2.93	382,574	1,813,823	I.....45,452	I.....2.57	0
New York.....	2,805,522	482,972	113,060	9,676,082	9,789,092	1,350,044	1.....	1,892,256	14,989,841	I.....1,220,172	I.....8.87	.....
New Jersey.....	445,500	7,790	32,242	1,638,992	1,671,231	1,350,044	1.....	541,415	2,665,938	D.....78,591	D.....2.58	183,384
Pennsylvania.....	2,007,637	.....	.....	16,404,895	16,404,895	1,350,044	1.....	22,600,459	11,012,991	I.....883,258	I.....8.72	.....
South Atlantic Division:												
Delaware.....	\$2,324,413	\$66,202	.....	178,086	178,086	1,350,044	1.....	52,798	269,523	D.....11,648	D.....6.3	0
Maryland.....	163,553	.....	42,889	1,341,566	1,397,395	1,350,044	1.....	277,230	1,828,178	I.....35,90	I.....35.90	.....
District of Columbia.....	239,116	.....	7,450	437,636	445,136	1,350,044	1.....	610,797	779,549	I.....210,008	I.....1.08	.....
Virginia.....	165,610	3,501	45,442	1,186,333	1,231,785	1,350,044	1.....	157,447	1,538,333	D.....16,972	D.....1.08	6,072
West Virginia.....	199,801	1,527	42,956	7,800,713	823,699	1,350,044	1.....	209,550	1,231,578	I.....46,903	I.....13.51	.....
North Carolina.....	66,889	.....	23,340	367,593	571,034	1,350,044	1.....	62,097	700,040	I.....46,903	I.....7.19	0
South Carolina.....	12,125	502	385,237	385,237	407,486	1,350,044	1.....	16,557	430,669	I.....6,243	I.....1.47	.....
Georgia.....	111,001	0	39,067	614,199	683,266	1,350,044	1.....	57,395	751,662	I.....39,072	I.....5.57	.....
Florida.....	10,000	.....	.....	644,199	644,199	1,350,044	1.....	225,110	434,110	I.....34,811	I.....7.75	.....
South Central Division:												
Kentucky.....	(232,342)	342	0	1,416,840	1,416,840	1,350,044	1.....	97,925	1,754,107	I.....754,107	I.....4.26	.....
Tennessee.....	49,721	14,946	33,055	887,669	920,725	1,350,044	1.....	38,503	38,503	D.....23,330	D.....2.23	.....
Alabama.....	975,829	65,585	13,991	553,763	567,744	1,350,044	1.....	65,650	757,121	I.....112,808	I.....18.89	.....
Mississippi.....	.....	.....	33,372	806,525	839,797	1,350,044	1.....	37,321	839,797	D.....37,321	D.....4.65	.....
Louisiana.....	13,843	0	24,479	416,165	470,643	1,350,044	1.....	39,783	514,270	D.....3,500	D......68	None.
Texas.....	175,748	.....	78,506	2,319,137	2,337,633	1,350,044	1.....	6204,791	2,778,172	I.....65,142	I.....7.92	.....
Arkansas.....	69,073	10,326	.....	790,133	790,133	1,350,044	1.....	31,658	901,191	I.....65,142	I.....7.92	.....
North Central Division:												
Ohio.....	1,300,085	.....	186,215	6,382,373	6,568,588	1,350,044	1.....	2,045,951	9,914,624	I.....560,985	I.....6.00	615,503
Indiana.....	1,588,910	0	141,265	6,714,517	6,855,723	1,350,044	1.....	2,332,441	10,279,874	I.....145,224	I.....4.75	381,613
Illinois.....	1,030,935	50,277	.....	6,714,517	6,855,723	1,350,044	1.....	2,332,441	10,279,874	I.....145,224	I.....4.75	381,613
Michigan.....	730,081	54,880	.....	6,714,517	6,855,723	1,350,044	1.....	2,332,441	10,279,874	I.....145,224	I.....4.75	381,613
Wisconsin.....	654,723	89,832	81,776	2,258,545	2,340,321	1,350,044	1.....	944,225	4,300,605	I.....397,697	I.....9.18	337,140
Minnesota.....	1,121,305	9,065	.....	6,714,517	6,855,723	1,350,044	1.....	445,135	3,490,010	I.....397,697	I.....9.18	107,552
Iowa.....	749,905	37,180	.....	6,714,517	6,855,723	1,350,044	1.....	1,192,846	3,844,634	I.....568,927	I.....18.45	489,011
Missouri.....	534,428	22,032	.....	6,714,517	6,855,723	1,350,044	1.....	1,192,846	3,844,634	I.....568,927	I.....18.45	319,476
Missouri.....	534,428	22,032	.....	6,714,517	6,855,723	1,350,044	1.....	1,192,846	3,844,634	I.....568,927	I.....18.45	222,355

Dakota.....	213,897	51,482	337,717	988,729	1,021,042	1.....28.92	506,869	1,790,963	1.....237,394	1.....15.28	37,065
Nebraska.....	61,428,348	62,893	1,682,093	1,682,093	1,511,530	1.....9.40	327,649	3,038,091	1.....489,918	1.....19.23	173,279
Kansas.....	1,051,125		2,677,513	2,677,513	1,312,108	1.....11.67	912,116	4,703,618	1.....638,702	1.....15.71	
Western Division:											
Montana.....	616,069		81,308	625,000	1.....87,065	1.....17.44	663,575	728,575	1.....257,393	1.....33.22	
Wyoming.....	3,6,711		28,002	684,908	1.....15,635	1.....17.32	180,000	611,800	1.....12,935	1.....10.52	
New Mexico.....			106,866	588,242	1.....943	1.....3.68	28,573	28,573	1.....3,281	1.....1.36	
Arizona.....	21,029	817	163,402	174,631	1.....3,745	1.....8.72	61,000	130,212	1.....2,431	1.....1.72	
Utah.....	33,580	4,094	106,874	174,631	1.....16,079	1.....8.14	32,113	214,270	1.....15,591	1.....5.33	
Nevada.....	9,510	1,417	106,874	174,631	1.....16,079	1.....8.14	11,683	128,253	1.....102,085	1.....17.56	0
Idaho.....	19,397	1,077	92,911	252,911	1.....171,868	1.....5.77	25,277	138,613	1.....433,194	1.....10.96	
Washington.....	58,559	0	213,633	213,633	D.....110		33,753	396,355			
Oregon.....	97,427	3,181	424,936	440,578			129,769	670,896			
California.....	621,555	66,145	3,083,027	3,149,172			527,036	4,387,527			
Alaska.....	6,090	1,800	12,440	14,240			2,534	22,774			
North Atlantic Division.....	{ 6,426,916	{ 123,761		26,774,145	1.....93.82		6,528,618	40,792,925	1.....2,141,805	1.....5.54	
South Atlantic Division.....	{ 900,519	{ 11,732		6,176,897	1.....284,800	1.....94.83	962,981	8,652,127	1.....471,840	1.....396.22	
South Central Division.....	{ 239,312	{ 28,857		7,403,515	1.....254,635	1.....93.56	478,310	8,524,238	1.....286,040	1.....4.75	
North Central Division.....	{ 371,214	{ 327,670		38,732,467	1.....819,970	1.....95.21	10,457,030	67,491,876	1.....278,000	1.....28.04	
Western Division.....	{ 1,181,778	{ 29,350		5,207,717	1.....311,020	1.....97.01	1,102,238	7,694,085	1.....220,800	1.....13.80	
United States.....	{ 18,840,238	{ 1,397,093		82,314,741	1.....685,175	1.....4.69	19,530,077	122,455,252	1.....8,193,405	1.....7.17	

SUMMARY.

a Estimated.
b Includes expenditure for libraries and apparatus.
c Not reported.
d School books and supplies.
e Includes board, fuel, and care of fires and school-houses.
f Increase in salaries of teachers only.
g These statistics are for 1886-87.
h Cost of tuition.
i Standing debt paid.

j Included in "other expenses."
k These statistics are for 1885-86.
l Salaries of teachers only.
m There were also expended \$5,181 for night schools.
n These are statistics for 1887.
o As far as reported.
p A few counties not reported.
q Amount of receipts.
r Includes funds for support of normal schools.

t Meagre estimate for country schools.
u Including rent of school-houses.
v Includes salaries of city superintendents.
w These statistics are for 1889.
x An estimate embracing all the States in the group to which it belongs.
y States not tabulated in the same column above are excluded from this summary.
z Excluding Alaska.
aa In the city of Wilmington.

aa In the city of Wilmington.

TABLE 15.—*Expenditure for Salaries of Superintendents and Teachers and Total Expenditure, mainly for 1887-88, reduced to a per capita basis; also the number of mills per dollar of assessed valuation expended for the same purposes.*

State or Territory.	Expenditure for Salaries of Superintendents and Teachers Per Capita of—			Paid to Superintendents and Teachers in Mills Per Dollar of Assessed Valuation.	Total Expenditure Per Capita of—			Total Expenditure in Mills Per Dollar of Assessed Valuation.
	Total Population.	Population 6-14.	Average Daily Attendance.		Total Population.	Population 6-14.	Average Daily Attendance.	
1	2	3	4	5	6	7	8	9
				<i>Mills per dollar.</i>	<i>Mills per dollar.</i>			
North Atlantic Division:								
Maine.....	a\$1.20	a\$7.51	a\$7.51	.....	\$1.93	\$12.03	\$12.03	b4.49
New Hampshire.....	1.34	9.58	11.03	.....	1.86	13.23	15.80	.....
Vermont.....	1.45	8.86	10.50	b3.01	1.95	11.93	14.12	b3.91
Massachusetts.....	2.65	18.03	20.11	2.75	3.45	23.42	26.13	3.53
Rhode Island.....	1.70	11.19	16.01	.....	2.61	17.17	24.57	.....
Connecticut.....	1.90	12.21	15.97	3.70	2.67	17.09	22.37	5.19
New York.....	1.79	10.88	15.52	2.82	2.74	16.65	23.76	4.32
New Jersey <i>b</i>	1.23	7.22	12.67	2.85	2.04	11.51	20.22	4.54
Pennsylvania.....	c1.30	c6.91	c9.50	.....	d2.24	d11.89	d16.34	.....
South Atlantic Division:								
Delaware <i>e</i>	f1.12	f6.15	f8.15	.....	1.50	9.30	12.33	.....
Maryland.....	1.33	6.93	14.61	b2.84	1.76	9.19	19.25	b3.86
District of Columbia.....	2.09	12.04	16.79	3.50	3.73	21.51	29.99	6.25
Virginia.....	.71	3.32	6.50	b3.62	.90	4.20	8.23	b4.64
West Virginia.....	1.12	5.08	6.75	5.14	1.63	7.61	10.12	7.53
North Carolina.....	.33	1.53	2.74	b2.53	.40	1.83	3.35	b3.91
South Carolina <i>b</i>.....	.37	1.66	3.25	2.89	.39	1.75	3.43	3.05
Georgia <i>g</i>.....	.40	1.73	3.02	.....	.44	1.96	3.32	.....
Florida.....	a1.21	a5.45	ab6.85	a5.44	1.30	5.87	b8.80	5.86
South Central Division:								
Kentucky <i>b</i>.....	.76	3.50	6.79	2.93	.94	4.34	8.41	3.63
Tennessee <i>b</i>.....	.51	2.23	3.17	e4.09	.57	2.54	3.52	a4.62
Alabama.....	.36	1.61	3.32	2.65	hi.45	hi2.03	hi4.17	hi3.33
Mississippi <i>b</i>	a.67	a2.91	a5.13	.....	.67	2.91	5.13	.....
Louisiana <i>g</i>.....	.40	1.87	5.83	2.22	.44	2.04	6.42	2.43
Texas <i>j</i>	1.07	4.87	8.36	3.50	1.24	5.65	9.68	4.06
Arkansas.....	f.65	f2.87	f5.95	f5.34	.74	3.27	6.79	6.09
North Central Division:								
Ohio.....	1.95	10.21	12.40	3.79	2.94	15.42	18.72	5.72
Indiana.....	1.64	8.13	8.48	.....	2.48	12.32	12.86	.....
Illinois.....	2.05	10.44	13.23	3.73	3.08	15.66	19.84	13.10
Michigan <i>b</i>	1.50	8.46	a11.09	e3.91	2.40	13.57	a17.73	a4.53
Wisconsin.....	1.41	7.23	a11.14	e4.25	2.11	10.78	a16.62	e6.25
Minnesota.....	1.53	8.41	15.36	3.53	3.02	16.64	30.40	6.99
Iowa.....	2.27	11.58	14.11	8.12	3.37	17.16	20.91	12.04
Missouri <i>b</i>	f1.27	f6.05	f8.38	f4.52	1.75	8.31	11.51	6.21
Dakota.....	1.80	11.01	18.58	6.13	3.26	19.94	33.66	11.10
Nebraska.....	1.85	9.33	12.93	.....	3.33	16.85	23.44	.....
Kansas.....	1.84	9.13	10.89	7.58	3.23	16.03	19.13	13.32
Western Division:								
Montana <i>b</i>.....	.....	.....	.....	.....	i2.58	i22.63	i35.19	i4.79
Wyoming <i>b</i>	f1.00	f3.47	a f2.64	f2.65	a1.40	a11.86	a31.71	a3.71
Colorado.....	2.00	16.15	18.60	3.47	3.93	31.74	26.57	6.83
New Mexico <i>k</i>	f.23	f1.20	f8.89	.....	.24	1.24	9.20	.....
Arizona.....	1.20	9.62	27.50	4.07	1.48	11.83	33.83	5.01
Utah.....	.95	4.40	8.86	3.76	1.33	6.16	12.41	5.27
Nevada <i>e</i>	f1.80	f15.07	f19.91	f4.07	2.16	18.09	23.89	4.89
Idaho.....	f.94	f6.24	f14.52	f4.37	1.40	9.31	21.67	6.51
Washington <i>b</i>	1.26	7.11	9.39	3.80	1.80	10.17	14.13	5.44
Oregon.....	1.72	9.37	12.42	b4.93	2.62	14.26	18.91	b6.61
California.....	2.89	18.21	23.82	3.30	4.02	25.37	33.18	4.59
Alaska.....	.36	1.78	c6.72	.....	.57	2.85	42.73	.....
SUMMARY.								
North Atlantic Division.....	1.67	9.86	13.32	12.83	2.54	15.02	20.29	14.17
South Atlantic Division.....	.70	3.27	5.72	13.39	.91	4.27	7.45	14.55
South Central Division.....	.67	3.00	5.55	13.34	.77	3.46	6.39	13.91
North Central Division.....	1.76	9.02	11.64	15.04	2.75	14.12	18.21	17.85
Western Division.....	2.04	12.86	19.22	13.43	2.97	18.76	23.02	15.05
United States <i>m</i>	1.38	7.13	10.43	13.78	2.06	10.60	15.50	15.62

a Estimated.

b These statistics are for 1886-87.

c Cost of tuition.

d Including debt paid.

e These statistics are for 1885-86.

f Salaries of teachers only.

g These statistics are for 1887.

h Includes support of normal schools.

i Amount of receipts.

j So far as reported.

k These statistics are for 1880.

l Only the States tabulated in the same column above are included in this summary.

m Excluding Alaska.

TABLE 16.—Percentage Classification of School Expenditure, mainly for 1887-88; showing the percentage of the whole expenditure devoted to each of the objects named.

State or Territory.	Sites, Buildings, Furniture, Libraries, and Apparatus.	Salaries of Teachers and Superintendents.	Other Expenses.	State or Territory.	Sites, Buildings, Furniture, Libraries, and Apparatus.	Salaries of Teachers and Superintendents.	Other Expenses.
1	2	3	4	1	2	3	4
North Atlantic Division:	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	North Central Division—	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Maine.....	10.80	a62.42	26.78	Continued,			
New Hampshire.....	14.38	72.12	13.50	Wisconsin.....	20.19	67.05	12.76
Vermont.....	9.05	74.33	16.62	Minnesota.....	29.40	50.53	20.07
Massachusetts.....	16.09	b76.95	6.96	Iowa.....	12.93	67.47	19.60
Rhode Island.....	22.95	65.17	11.88	Missouri c.....	9.56	g72.79	17.65
Connecticut.....	7.49	71.41	21.10	Dakota.....	12.93	67.47	19.60
New York.....	22.02	65.34	12.64	Nebraska.....	33.85	55.37	10.78
New Jersey c.....	17.00	62.68	20.32	Kansas.....	23.68	56.93	19.39
Pennsylvania.....	18.23	d58.16	e23.61	Western Division:			
South Atlantic Division:				Montana.....			
Delaware f.....	14.24	g66.07	19.59	Wyoming a c.....	13.46	g71.41	15.13
Maryland.....	8.95	75.89	15.16	Colorado.....	26.62	50.87	22.51
District of Columbia.....	30.03	55.99	13.93	New Mexico j.....	0	g96.65	3.35
Virginia.....	10.85	79.05	10.10	Arizona.....	17.55	81.30	1.15
West Virginia.....	16.31	66.72	16.97	Utah.....	15.40	71.45	13.15
North Carolina.....	9.55	81.58	8.87	Nevada f.....	7.74	g83.31	8.95
South Carolina c.....	2.93	94.62	2.45	Idaho.....	14.77	67.00	18.23
Georgia h.....	1.46	90.90	7.64	Washington c.....	19.17	69.94	10.89
Florida.....				Oregon.....	15.00	65.67	19.33
South Central Division:				California.....	16.21	71.78	12.01
Kentucky c.....	13.65	80.77	5.58	Alaska.....	26.35	62.53	11.12
Tennessee c.....	6.32	89.92	3.76				
Alabama.....	11.14	79.65	9.21	SUMMARY.			
Mississippi.....				North Atlantic Division.....	18.36	65.63	16.01
Louisiana h.....	4.74	91.52	7.74	South Atlantic Division.....	11.33	76.71	11.96
Texas.....	6.33	86.30	7.37	South Central Division.....	7.54	86.85	5.61
Arkansas.....	8.81	g87.68	3.51	North Central Division.....	17.83	63.93	18.19
North Central Division:				Western Division.....	16.91	68.58	14.51
Ohio.....	13.11	65.25	20.64	United States k.....	16.83	67.22	15.95
Indiana.....	30.23	65.96	3.81				
Illinois.....	10.52	66.69	22.79				
Michigan c.....	17.65	62.39	19.96				

a Estimated.

b Includes board, fuel, and care of fires and school-houses.

c These statistics are for 1886-87.

d "Cost of tuition."

e Including debt paid.

f These statistics are for 1885-86.

g Salaries of teachers only.

h These statistics are for 1887.

i Expenditure for sites, buildings, etc., imperfectly reported.

j These statistics are for 1880.

k Excluding Alaska.

TABLE 17.—Permanent School Funds, Total Assessed Valuation, and Valuation of School Property, mainly for 1887-88.

State or Territory.	Permanent School Fund.			Assessed Value of all Taxable Property.			Estimated Cash Value of All School Property.							Value for Each \$100 of Total Assessed Valuation.
	Increase during the Year.	Amount Yielding Revenue.	Amount not Yielding Revenue.	Total Assessed Valuation.	Increase or Decrease since Preceding Year.	Value Per Capita of Total Population.	Value Per Capita of Population 6 to 14.	Value of All School Property.	Increase or Decrease since Preceding Year.	Per Cent. Increase or Decrease	Value Per Capita of Total Population.	Value Per Capita of Population 6 to 14.	Average Daily Attendance.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
North Atlantic Division:														
Maine.....		(a)		\$235,599,888		\$5305	\$22,278	\$3,328,743	I.....\$22,376	I.....0.68	\$5.18	\$22.33	\$32.33	\$1.40
New Hampshire.....	0	d \$378,816		6157,192,262		6472	62,884	2,355,121	I.....143,889	I.....6.74	6.48	46.19	53.21	
Vermont.....		2,715,914	0	1,932,648,807		963	6,543							
Massachusetts.....		273,331	\$5,395											
Rhode Island.....		2,014,572		349,725,773	I.....\$514,176	514	3,295	2,537,595	I.....138,564	I.....5.56	8.02	52.82	75.56	
Connecticut.....	\$12,983	7,987,601		3,469,190,945	I.....1,08,071,768	635	3,856	6,063,269	I.....293,374	I.....5.63	8.91	57.13	74.76	1.73
New York.....	51,302	23,422,276		586,917,360	D.....13,706,079	223	1,010	37,414,355	I.....1,041,802	I.....2.86	6.85	41.59	53.34	1.08
New Jersey.....								7,486,206	I.....223,167	I.....3.07	5.72	32.33	56.77	1.28
Pennsylvania.....								38,998,784	I.....2,007,637	I.....5.43	7.94	42.09	57.85	
South Atlantic Division:														
Delaware.....				476,829,611	I.....7,236,386	465	2,435	733,032			4.02	25.31	33.53	
Maryland.....				127,214,025		597	3,441	1,761,000			8.26	47.61	66.42	1.38
District of Columbia.....	0	1,191,027	0	633,342,723	D.....3,892,984	6200	6932	2,117,603	I.....269,828	I.....11.00	1.23	5.71	11.18	6.56
Virginia.....	15,969	606,462		163,863,088	D.....13,796,079	223	1,010	2,044,456	I.....110,084	I.....5.69	2.79	12.60	16.76	1.25
West Virginia.....	0	99,250	(g)	6210,037,453	I.....7,282,831	6126	6584	733,511	I.....72,154	I.....10.83	4.43	1.97	3.53	6.31
North Carolina.....				141,986,154	I.....912,154	126	568	4435,455	I.....74,951	I.....20.79	h.39	41.74	43.12	h.31
Georgia.....														
Florida.....	6,000	500,400	(i)	82,600,376		222	1,002	406,374			1.09	4.93		.49
South Central Division:														
Kentucky.....	0	1,779,447		483,491,690	I.....59,716,101	297	1,196	2,896,549	I.....325,768	I.....12.67	1.78	7.16	13.89	.60
Tennessee.....		226,841,184		226,841,184		132	591	1,797,769			1.04	4.69	6.46	.79
Alabama.....	15,460	2,611,132		214,000,000	I.....314,000,000	135	608	6,500,000			2.34	1.53	63.07	62.25
Mississippi.....														
Louisiana.....	136,000	1,130,867		211,925,751	I.....324,587,600	182	842	713,843			.62	2.85	8.97	.84
Texas.....	1,500,000	218,000,000	(o)	685,000,000	I.....8,366,965	307	1,393	2,830,000			1.57	7.12	12.20	.51
Arkansas.....				148,250,654	I.....8,366,965	122	537	705,277	I.....61,210	I.....9.50	.58	2.56	5.31	.48

North-Central Division:												
Ohio.....	4,732,083,796	I.....28,576,077	514	2,693	320,000,000	I.....712,251	1.....42.43	8.99	46.65	56.63	1.73	
Indiana.....		D.....12,841,013	255	1,196	15,000,000	1.....1,000,000	1.....7.14	7.09	35.16	36.70		
Illinois.....	0	751,911,874	4,919	2,802	24,940,738	1.....556,624	1.....2.28	7.47	37.59	48.14	3.18	
Michigan.....	0	916,450,000	7,319	4,632	12,174,599	1.....323,553	1.....2.73	6.19	34.91	45.77	31.25	
Wisconsin.....		498,725,833	7,133	4,231	7,968,372	1.....228,494	1.....2.64	4.81	24.61	37.91	31.59	
Minnesota.....	8,024,614	7,530,000,000	290	1,426	8,756,175	1.....302,354	1.....3.03	6.89	37.90	42.54	31.59	
Iowa.....	4,264,961	565,723,571	282	1,335	12,331,297	1.....1,099,591	1.....20.51	4.71	22.37	30.99	1.67	
Missouri.....	10,561,954	701,908,503	282	1,335	11,733,494	1.....73,350	1.....2.27	6.01	36.72	62.00	2.04	
Dakota.....		161,420,974	291	1,797	3,298,871	1.....331,061	1.....6.98	5.62	28.41	39.52		
Nebraska.....					5,123,180	1.....331,061	1.....6.98	5.62	28.41	39.52		
Kansas.....	353,237,223	I.....4,338,003	243	1,264	8,608,202	1.....600,409	1.....7.50	5.92	29.34	35.01	2.41	
Western Division:												
Montana.....	60,200,000		538	4,721	513,367	I.....109,779	1.....25.08	4.89	42.92	66.75	.91	
Wyoming.....	32,089,217		378	3,201	3,238,021	I.....742,920	1.....29.78	11.04	89.19	102.71	1.92	
Colorado.....	168,813,247	I.....27,601,463	575	4,650	13,500	1.....46,269	1.....25.29	2.03	20.19	57.73	p .85	
New Mexico.....					922,359	1.....16,269	1.....25.29	2.03	20.19	57.73	p .85	
Arizona.....	0		726	2,362	542,756	1.....66,602	1.....62.77	64.46	637.39	641.46	1.17	
Utah.....		46,370,073	252	1,169	624,578	1.....96,092	1.....62.77	64.46	637.39	641.46	1.17	
Nevada.....		236,217,013	312	3,702	6279,500	1.....79,760	1.....16.27	3.37	18.97	26.38	1.01	
Idaho.....		21,288,332	215	1,429	569,881	1.....25,400	1.....2.00	5.07	27.51	36.51	1.48	
Washington.....		66,177,453	332	1,870	569,881	1.....25,400	1.....2.00	5.07	27.51	36.51	1.48	
Oregon.....		686,000,000	631	61,924	4,295,218	I.....1,079,619	1.....11.38	9.63	61.09	79.89	1.11	
California.....	330,000	2,975,500	873	5,526	10,563,780							
Alaska.....		121,127										
SUMMARY.												
North Atlantic Division.....			4615	43,981	916,453,000		I.....44.14	47.47	44.49	457.79	41.17	
South Atlantic Division.....			4233	41,062	11,943,290		I.....43.59	41.30	46.31	411.00	4.68	
South Central Division.....			4201	42,012	11,740,000		I.....42.04	41.03	44.74	408.89	4.52	
North Central Division.....			4351	41,814	139,537,923		I.....44.45	41.69	34.36	44.32	41.10	
Western Division.....			4610	46,897	97,707,200		I.....44.33	47.13	44.58	405.31	41.21	
United States.....			4680	41,569	4297,481,328		I.....45.22	45.00	45.70	437.88	41.35	

a Fund in 6 per cent. bonds, yielding a revenue of \$25,000.

b Value of school-houses only.

c 400,000 acres of land.

d Approximate.

e Maximum estimate.

f These statistics are for 1887.

g There are also some school lands, value not reported.

h Also 7,000,000 acres of land leased.

i 21,000,000 acres of land.

p Estimated.

q Also school lands estimated at 1,537,618 acres.

r Also 1,215,728 acres of land.

s These statistics are for 1880.

t Proceeds of sales of lands held for investment.

u Only the States tabulated in the same column above are included in this summary.

v An estimate embracing all of the States of the group to which it belongs.

TABLE 18.—*Chief State School Officers.*

[NOTE.—This list has been revised to date of going to press.]

Name.	Address.	Official Title.
Solomon Palmer.....	Montgomery, Ala....	State superintendent of education.
Woodville E. Thompson	Little Rock, Ark....	State superintendent of public instruction.
Ira G. Hoitt	Sacramento, Cal	Do.
Fred Dick	Denver, Colo	Do.
Chas. D. Hine.....	Hartford, Conn.....	Secretary of State board of education.
A. N. Raub.....	Newark, Del	President of State board of education.
Albert J. Russell.....	Tallahassee, Fla	State superintendent of public instruction.
James S. Hook.....	Atlanta, Ga	State school commissioner.
Richard Edwards.....	Springfield, Ill	State superintendent of public instruction.
H. M. La Follette	Indianapolis, Ind....	Do.
Henry Sabin.....	Des Moines, Iowa....	Do.
J. H. Lawhead.....	Topeka, Kans	Do.
Jos. Desha Pickett	Frankfort, Ky	Do.
Joseph A. Breaux.....	Baton Rouge, La....	State superintendent of education.
Nelson A. Luce.....	Augusta, Me	State superintendent of common schools.
M. A. Newell.....	Baltimore, Md	State superintendent of public instruction.
John W. Dickinson	Boston, Mass.....	Secretary of State board of education.
Joseph Estabrook.....	Lansing, Mich.....	State superintendent of public instruction.
D. L. Kiehle.....	St. Paul, Minn	Do.
J. R. Preston.....	Jackson, Miss	State superintendent of education.
Wm. E. Coleman.....	Jefferson City, Mo ..	State superintendent of public schools.
Geo. B. Lane.....	Lincoln, Nebr	State superintendent of public instruction.
W. C. Dovey.....	Carson City, Nev	Do.
James W. Patterson	Concord, N. H.....	Do.
Chas. W. Fuller.....	Trenton, N. J	Do.
Andrew S. Draper.....	Albany, N. Y	Do.
Sidney M. Finger.....	Raleigh, N. C	Do.
John Hancock.....	Columbus, Ohio	State commissioner of common schools.
E. B. McElroy.....	Salem, Oregon.....	State superintendent of public instruction.
E. E. Higbee.....	Harrisburg, Pa	Do.
Thos. B. Stockwell	Providence, R. I	Commissioner of public schools.
James H. Rice.....	Columbia, S. C	State superintendent of education.
Frank M. Smith.....	Nashville, Tenn	State superintendent of public schools.
Oscar H. Cooper.....	Austin, Tex	State superintendent of public instruction.
Edwin F. Palmer.....	Waterbury, Vt	Do.
John L. Buchanan.....	Richmond, Va	Do.
Benj. S. Morgan.....	Charleston, W. Va ..	State superintendent of free schools.
Jesse B. Thayer.....	Madison, Wis	State superintendent of public schools.
Sheldon Jackson.....	Sitka, Alaska	General agent of education for Alaska.
Charles M. Strauss.....	Tucson, Ariz	Superintendent of public instruction.
Eugene A. Dye.....	Bismarck, Dak	Do.
Wm. B. Powell, white }	Washington, D. C....	Superintendent of District schools.
G. T. Cook, colored }		
Charles C. Stevenson.....	Boisé City, Idaho....	Superintendent of public instruction.
A. C. Logan.....	Helena, Mont	Do.
Trinidad Alarid	Santa Fé, N. Mex....	Ex-officio superintendent for reports.
P. L. Williams.....	Salt Lake City, Utah..	Commissioner of schools.
J. H. Morgan.....	Ellensburg, Wash ..	Superintendent of public instruction.
John Slaughter.....	Cheyenne, Wyo.....	Do.

CHAPTER IV.

DIGESTS OF STATE SCHOOL REPORTS.

ALABAMA.

[From Report for 1887-88 of State Superintendent Solomon Palmer.]

GENERAL STATEMENTS.

Superintendent Palmer states that during the year 1887-88 he visited twenty-one counties of the State for the purpose of inspecting the schools and organizing teachers' institutes, and that he found the schools in a reasonably good condition, that officers and teachers were making great efforts to make the schools as successful as possible with the small amount of funds at their disposal, and that the public schools are so increasing in popularity that every one now admits that they are indispensable to the prosperity and happiness of the people.

"Notwithstanding the difficulties that our public schools have had to encounter in the past, they have accomplished much good in giving the rudiments of an education to thousands who, without them, would have grown up in ignorance to swell the already long list of illiterates that are a blot on the fair name of our State. Many who have received in these public schools all the instruction that they have ever received or will ever receive, will grow up to noble manhood and lovely womanhood, to honor the State and to bless their race, indebted to our public school system for all the good they accomplish in the world."

NEED OF INCREASED FUNDS.

The great need of the schools since the establishment of the public school system has been a sufficient amount of funds; but now, when the value of property is increasing so rapidly and capital is pouring in from other States, it is absolutely necessary that the schools be placed upon a firm foot-hold. Heretofore when it has been asked that more money be appropriated for the benefit of the schools, the reply has always been that there were no funds in the treasury, and that the people could not bear a heavier burden of taxes than that already imposed; but this answer can no longer be given, for at the close of the last fiscal year there were more than half a million of dollars in the vaults of the State treasury, and the auditor recommends that the tax rate be reduced ten per cent. in order to avoid the accumulation of a surplus. The tax rate at present is only five mills on the dollar, or 50 cents on a hundred dollars' worth of taxable property, and there is no complaint of heavy taxes, but there is a strong demand from all parts of the State for much longer school terms and a better class of teachers at good salaries. At present the schools are kept open on an average only a little more than three months, and the teachers are paid only \$22 dollars per month; but if the tax rate is kept at five mills, the appropriation for schools can safely be increased from one hundred and fifty thousand to two hundred thousand dollars more than the sum now appropriated.

By a comparison of statistics Superintendent Palmer shows that Alabama is not doing near so much for public schools as the other Southern States similarly situated, and when compared with the Northern and Western States, the difference is much greater still.

"It would be a waste of time to attempt to show the advantages arising from a good public school system. All thoughtful persons admit that in a republican form of government, such as ours, a public school system is indispensable to its perpetuity. If called on for an argument in their favor I need go no further than the constitution of our own State to show that it is the sworn duty of the General Assembly to establish, organize, and maintain a system of public schools throughout the State for the equal benefit of the children thereof between the ages of seven and twenty-one years. For the

benefit of those who may doubt the propriety or wisdom of larger appropriations for our public schools, I will remark that every State in the Union, and every country, worthy of the name, on the globe, have organized and are now maintaining at the public expense a school system for the education of the young. The question is not whether we shall have a public school system—that is settled by our constitution, by the custom of all civilized countries—but whether we shall have a public school system equal to the demands of the times, and that will not suffer in comparison with the systems of other States.”

The greatest difficulty encountered by the State commissioner of agriculture and immigration on his recent trip to the North to induce immigrants to come to the State was the poor facilities for education as compared with those of the Northern States. It is desirable to secure as immigrants those persons who value highly the educational facilities of a country, and not the ignorant and lawless who have no regard for the future welfare of their children.

CONSTITUTIONAL AMENDMENT.

The constitution and statutes of the State expressly forbid any portion of the school money to be used to build or repair school-houses, and according to a decision of the Supreme Court no special tax can be levied for school purposes in townships or school districts, and not more than five mills can be raised in counties, cities, towns, or other municipalities for general purposes, and as all the funds thus raised are usually needed for current expenses, nothing is left for the public schools. In many of the States a large portion of the public funds is raised by local taxes. A special tax of three mills for school-houses and furniture is very badly needed, and the superintendent recommends that a constitutional amendment be submitted to the people authorizing and requiring a special tax by each county for school purposes of not less than two nor more than five mills on a dollar's worth of taxable property, and that townships and separate school districts be authorized to levy and collect a school tax not to exceed five mills on the dollar.

POLL-TAX.

Township superintendents have always had great difficulty in estimating how much money from poll-taxes would be available for school purposes during the year, and consequently some county superintendents have refused to approve contracts made with teachers, while others have approved contracts for larger amounts than were realized. To overcome this difficulty the superintendent recommends that the amount of poll-tax collected each year in each township and separate school district be made the basis of all contracts for the succeeding year.

COUNTY SUPERINTENDENTS.

The present law making it the duty of the State superintendent to appoint the county superintendents was enacted in 1877, but there has always been some dissatisfaction with it, and special acts have been passed from time to time permitting the superintendents of different counties to be elected by the people, until now we find twenty-three counties electing their superintendents who qualify at different times, thus causing much confusion and irregularity in the administration of the schools. It is very desirable that a uniform system be adopted, either requiring all to be appointed or all to be elected at the same time.

Superintendent Palmer thinks that it would prove for the best interests of the schools and give more general satisfaction to the people if the county superintendents were elected directly by the people, and any law to deprive the people of their right to elect their county superintendents in the counties now having this privilege would meet with strong opposition. If a law were enacted for the election of all the county superintendents by the people of their respective counties it would have several advantages over the present method. In the first place it would secure a uniformity which is very much needed and which can scarcely be brought about in any other way; and secondly, it would make the people more directly responsible for the success or failure of the schools, and thus make them to become better acquainted with and to take a greater interest in them. As all the county officers are elected for four years, the county superintendent should be elected for the same length of time.

He also urges upon the Legislature the propriety of paying the county superintendents better salaries. “No other officers, save perhaps township superintendents, are so poorly paid. Their duties are onerous, responsible, and often harassing, and their faithful performance of the greatest importance to the success of our public schools. I believe it would advance the school interest of the State to pay them salaries sufficient to enable them to devote all their time to the duties of their offices, and to require them to visit every public school in their counties at least once during its session. The Legislature enacted a special law for Jefferson requiring this, and providing that the county

superintendent should be paid \$65 per month, over and above the regular compensation of county superintendents, out of the county treasury, and I am informed that the people of the county are well pleased with the law."

APPEALS FROM DECISIONS OF TOWNSHIP SUPERINTENDENTS OR TRUSTEES.

Under the present laws appeals from the decisions of township superintendents and trustees are restricted to the transactions of the meeting of parents and guardians the last week in October, and an appeal can then be taken to the county superintendent only. The right of appeal is liable to abuse and should not be enlarged too much, but at the same time every provision should be made against the liability of an injustice being done. Hence it is advised that appeals from decisions be not limited to any particular meetings, and that appeals may be taken from the county superintendent to the educational board of the county.

SALARIES OF TEACHERS.

Under the present regulations there is no great inducement to teachers to make efforts for first-grade certificates, as the holder of a third-grade certificate may be paid as much as one who holds a certificate of the first grade. The superintendent recommends that a law be passed making salaries of third-grade teachers from ten to twenty dollars per month; those of second-grade teachers from twenty to thirty-five dollars per month; and that teachers of the first grade shall not be paid less than thirty-five dollars per month, if there are sufficient funds for a three months' session at that rate, nor more than fifty dollars unless there are sufficient funds to run the schools six months or more at that rate, or where the patrons supplement the salary of the teacher.

RENT OF SCHOOL LANDS.

In many townships of the State the sixteenth sections of school lands have never been sold, but are leased as provided by law, and the money received from them is reported to the county superintendent, but the law requires no report of it to be made to the State superintendent, so that it might be deducted from the apportionment to such townships. A law should be passed requiring the county superintendents to notify the State superintendent of all money received as rent from school lands.

TEACHERS' EXAMINATIONS.

The law prescribes upon what branches and by whom teachers shall be examined, and that correct answers shall be given to 70 per cent. of the questions in order to obtain a license. The questions are prepared by the boards of examiners in the different counties, and there is a great difference in the character of the questions asked. In some counties questions are asked candidates for third-grade certificates that only the most thorough scholars could answer, while in other counties only the simplest questions are given candidates for certificates of the first grade. Frequently "catch questions" are given, or such as require a retentive memory only. The superintendent thinks that it should be the duty of the State superintendent, assisted by two experienced teachers, to prepare different series of questions to besent out together with rules for conducting the examinations, to the different boards of examiners. This plan has been adopted in many of the States and gives very general satisfaction.

RECOMMENDATIONS.

Superintendent Palmer recommends: That an appropriation for the benefit of the public schools of not less than \$100,000 be made in addition to the regular annual appropriation.

That the State constitution be so amended as to authorize and require the levy and collection of a tax not exceeding five mills on the dollar, in counties, cities, towns, townships, or other school districts, to be used for building and furnishing school-houses, or for other school purposes.

That all county superintendents be elected by the people, that their salaries be increased from \$75 to \$150 per annum, and that they be required to visit every school in their respective counties, for which they shall receive compensation out of the county treasuries.

That provision be made by law for securing a complete enumeration of all persons within the school age.

That the pay of teachers be graded according to their certificates.

That the scholarship required for a third-grade license embrace such a fair knowledge of English grammar as will enable the applicant to speak and write the language with reasonable correctness, and that all applicants for a teacher's license be required to pay 50 cents before being examined.

That the poll-taxes collected each year from each race be made the basis for teachers' contracts and payments the succeeding year.

That the right of appeal from decisions of township superintendents and trustees be extended.

That county superintendents be required to report to the State superintendent as to the renting of school lands.

That probate judges be required to report abstracts of the assessments of poll-tax to the auditor instead of to the State department of education, and that by the last day of July, or as soon as settlements are had with the collectors, the auditor shall certify to the department of education the amount of poll-taxes paid into the State treasury to the credit of the school fund of each county and school district receiving its school fund direct from the State treasury.

"That county superintendents be required to send to this department but one payroll, retaining a duplicate, which, together with the original, when returned with the funds for payment of teachers each quarter, shall be signed by the teachers and retained by the county superintendent and filed in his office.

"That tax collectors, at the end of each month in which they collect any poll-tax, shall make report of the same in duplicate, sending one report to this department and the other to the county superintendent. That the collector shall first deduct the commissions allowed by law to the assessor and himself from the amount of poll-tax collected for each race in each township and school district, and report only the net amount paid into the treasury to the credit of the school fund for each race in each township and school district."

ARIZONA.

The Legislature of Arizona failed to make any provision for the printing of the report of the superintendent of public instruction. For whatever information relating to education in Arizona is contained in this Report consult the Index.

ARKANSAS.

[From Report for 1886-87 and 1887-88 of State Superintendent Woodville E. Thompson.]

GENERAL STATEMENTS.

That the schools of Arkansas have made great advances in the last few years is acknowledged by all. This has been caused by the interest manifested by the people in the schools and their efforts to place them in a better condition, and by the faithful work of an earnest corps of teachers. The superintendent says "that no State in the Union is doing more for public schools in proportion to its taxable property than is Arkansas"—a statement which many may be disposed to accept *cum grano salis*, but which he says will be found correct upon investigation. The taxes for school purposes are cheerfully paid by the people. During the last few years many valuable school-houses have been built, and now it is probable every county in the State has one or two school-houses which cost from three to five thousand dollars. No distinction is made in the schools between the children of different classes, but the children of senators, representatives, and day laborers meet in the same room and are treated in the same manner.

There is still room for improvement, however, especially in the country schools, where three-fourths of the children are educated. The term of the schools should be longer, and means should be provided for a better equipment of the schools.

GROWTH OF THE SCHOOL SYSTEM.

In 1827 Congress gave the Territory of Arkansas seventy-two sections of land for the purpose of establishing a seminary of learning, but afterwards this grant was modified so as to allow the lands to be used for the benefit of the common schools. In 1836 an additional grant of the sixteenth section of every township, and seventy-two sections, known as saline lands, was made for the benefit of the common schools. From the admission of Arkansas as a State, in 1836, excellent constitutional and legislative provisions were made for the common schools, and there was a large revenue from the sales of school lands, but we find no evidences of the progress of the schools, and very probably little was accomplished.

The Legislature of 1866-67, composed of the best and most intelligent men of the State, passed an act providing for school revenues and for the proper administration of the system, under a State superintendent and county commissioners, and for the examination and licensing of teachers. From this time the schools began to make some improvement, which was steadily kept up, except during the two years from July, 1873, to 1875. From 1875 the expenditures for school purposes have gradually increased until, in 1888, we find the amount nearly one million dollars.

COUNTY SUPERVISION.

Superintendent Thompson again calls the attention of the Legislature to the importance of having a county superintendent for the public schools. No private corporation having so many persons engaged in its work and such interests involved would neglect to provide some one fully acquainted with the work by experience to see that it was properly and faithfully performed. The State is spending many thousands of dollars every year upon the public schools, and these schools are determining to a large extent what shall be the intellectual development and moral qualifications of its future citizens. When these considerations are taken into account, the necessity of competent and faithful supervision is so patent that all must acknowledge it.

SCHOOL DISTRICTS.

In the reports of the State superintendent for the years 1884 and 1886, attention was called to the advantages to be derived from abolishing the school districts and instituting township districts. Superintendent Thompson thinks that it is absolutely necessary to the proper administration of the schools that the change be made. There are at present four thousand two hundred and eight school districts, and more than twelve thousand directors, many of whom are not competent to discharge their duties, and others often neglect them. If the directors were chosen from the entire township much better officers could be selected, and there would be less probability of designing men getting control of the school affairs in order to defeat a school tax, or to give a teacher's place to some dependent relative, as is too frequently the case at present.

It sometimes occurs that in one of two school districts adjoining each other the school term will be eight or nine months, there will be an excellent teacher and a comfortable school-house; while in the other the opposite conditions prevail, the school term possibly being two or three months. Under the township system such differences would not occur; there would be no trouble in transferring a pupil from one school to another, the number of patrons attending each annual meeting would be much larger, and the interest correspondingly greater. The testimony is given of quite a number of superintendents of States where the system has been partially or entirely adopted, showing its advantages and a general desire on the part of school officers to abolish the district plan.

TEXT-BOOKS.

How to secure uniformity of text-books at the least expense is a question which has been very generally considered, and the superintendent of education of Arkansas thinks that the Legislature should take some action to secure this end. The plan suggested is State and county adoption, or else the furnishing of books by the school district.

REVENUE.

The amount of funds received for school purposes in 1887-88 was sufficient to secure an average school term throughout the State of only four months, and hence the possibility of longer terms without increased taxation deserves careful consideration. In 1874 and 1879 there were destroyed by mistake large amounts of interest-bearing State scrip, which with the accumulated interest up to the present time would exceed \$300,000, all of which can easily be replaced by the State, and the permanent school fund would thus be increased to more than \$500,000. Besides, the Legislature in 1875 passed an act granting to the school fund ten per cent. of the net proceeds of all sales of public school lands, but the schools have received nothing whatever from this source.

If the addition from these sources could be made to the school funds, there would be a sufficient amount to maintain the schools for a month longer than at present.

RECOMMENDATIONS.

The following changes in the school law are recommended by the State superintendent: That the State apportionment shall be made by the second Monday in September of each year, and that the auditor be required to report on the first Monday the amount for apportionment in the State treasury on the 1st of September.

That the county examiners and district directors be required to make their reports by July instead of September.

That the State board of education instead of the State superintendent be authorized to examine applicants for State licenses, and that each applicant be required to pay a fee of \$10 which shall be used in paying the examining committees.

That the returns of the annual district elections be made within ten days after said elections.

That the directors be required to select text-books from the list recommended by the State board or by the State superintendent.

That the county treasurer shall receive two per cent. commission on all money paid out by him on warrants drawn by school directors.

That certificates of election shall be given to those persons elected district directors within five days after the election.

CALIFORNIA.

[From Report for 1886-87 and 1887-88 of State Superintendent Ira G. Hottel.]

GENERAL STATEMENTS.

It is thought that at no time have the people received more and better work for their money expended upon schools than in the last two years. The teachers have been well qualified for their business and have taken great interest in it, and the county superintendents have made every exertion to put the schools in a condition of the greatest usefulness. Two hundred and five schools report that they have not sufficient school grounds, while a large number of others report that their houses are badly ventilated and that they are not supplied with good furniture and other apparatus.

The latest census returns show the population five to seventeen years of age to be 270,500, which is apparently a decrease from the number of the previous year. This is occasioned by a discrepancy in the returns from San Francisco for the two years. None but strictly honest and faithful men should be selected as school census marshals, and they should not be selected as a reward for party service; and a law should be passed forbidding that they be paid at so much per capita of the children listed, as this offers a great temptation for false returns.

The State superintendent recommends that kindergartens and county high schools be made a part of the public school system of the State, and thinks that the establishment of manual training schools will be of great benefit to the State.

PRIVATE SCHOOLS.

The number of children five to seventeen who attended private schools during the year 1887-88 was 20,768, or 7.68 per cent., which is about the same proportion as for several years past. The principals of all private schools should be required to report both to the census marshal and to the State superintendent, so that the exact number of children in the State attending school may be known.

NON-ATTENDANCE.

The number of census children not attending any school during the year was 61,345, which is apparently a very large number of children growing up in ignorance; but it should be remembered that a large part of these are children under seven years of age who will probably attend afterwards, while many others are temporarily withdrawn from school for various reasons and will attend again. Still, the number is larger than it should be, and every school district should be required to furnish accommodations for every child desiring admission, or else forfeit its part of the State school money; and then the compulsory school law should be strictly enforced.

TEACHERS.

There are now 1,112 teachers in the State holding life diplomas. In the matter of teachers' compensation California stands among the very first States of the Union; and she allows the same compensation for like work, whether done by men or women. No person should be employed as a teacher who is not possessed of a strong and healthy physical constitution by which he is enabled to throw life and animation into the work of the school-room, and to endure the nervous strain consequent upon teaching.

COUNTY SUPERINTENDENTS.

Only the very best men should be chosen as county superintendents; progressive, earnest, and practical educators; and when such have been chosen, they should be paid a reasonable salary. The salaries of county superintendents now range everywhere from \$100 to \$4,000, showing that while some are paid well others receive mere pittance. Each county superintendent should be required to send in a brief report of the condition and progress of each school in his county, such reports to be of the same size that they might be bound together.

TEXT-BOOKS.

A constitutional amendment was adopted in 1884 for the compiling, printing, and publishing of a series of text-books for the common schools of the State, which books should be sold at cost and should not be changed for four years. The Legislature of 1885 appropriated \$20,000 for compiling the books, and \$150,000 for the necessary plant, ma-

terials, and labor. The books to be printed were: Three readers, one speller, one arithmetic, one history of the United States, and one geography. The following persons were entitled to make orders for books: County superintendents of schools, principals of State normal schools, secretaries and clerks of school districts, and retail dealers.

The present State superintendent states that when he came into office "no adequate means had been provided for the distribution of the text-books, and no provision whatever had been made for producing additional books after the first appropriation should become exhausted, the first editions of the books sold, and the money paid into the State treasury."

In 1887 an amendatory and supplementary act was passed making provision for the following text-books, in addition to those previously mentioned: One elementary arithmetic; one elementary grammar, or language lessons; one elementary geography; one physiology and hygiene, including a system of gymnastic exercises, and special instruction as to the nature and effects of alcoholic drinks and narcotics. One hundred and sixty-five thousand dollars, together with the unexpended balance of the former act, were appropriated to cover the expense of printing the books, and \$15,000 for compilation.

"The poor binding of the first edition of the readers and speller has been the principal cause of complaint concerning the books. Fortunately, however, the first editions of these books were not large, and the superintendent of State printing was requested to notify the then foreman of the bindery that no more inferior work would be accepted or passed by the board of education. No complaints have been made concerning the binding of subsequent editions, and we doubt if any publishing house can be found which turns out better presswork and better binding on text-books than that which is now done at the State printing office at Sacramento, under the superintendence of Mr. J. D. Young."

The following shows the cost of the books:

Prices of books now issued and ready for use, June 14, 1888.

Name of book.	Cost Price at Sacramento.	Cost by Mail.	Price to Pu- pil from Re- tail Dealers.
	Cents.	Cents.	Cents.
First Reader.....	15	20	20
Second Reader	33	41	40
Third Reader.....	54	66	65
Speller.....	25	31	30
Primary Number Lessons.....	20	25	25
Advanced Arithmetic	42	50	50
English Grammar.....	42	50	50
United States History.....	70	82	80

One of the important results of publication by the State is that uniformity of text-books is secured throughout the State. The State superintendent says:

"Having been one of the earliest advocates of a State series of text-books, it has not only been my duty but my purpose and pleasure to aid in giving the scheme a fair trial, and bringing the experiment to a successful issue. Since some of the books have been issued and gone into use I find many persons who, being opposed to the undertaking at first, have now become convinced of its feasibility and economy. Some of the books have been pronounced the best of their kind, and I am of the opinion, judging from my observations in various schools which I have visited, and from the expressions of superintendents and teachers at institutes, that the experiment thus far has fully met the expectations of its most ardent friends, and that the books themselves are giving a good degree of satisfaction.

"If the books are as good as others, or will answer the purpose as well, then the question which most concerns the parents is, Which will cost the least? It may be claimed, and must be admitted, that it costs the State more to manufacture the books than it would cost a private publishing house. The State pays better wages than the private publisher, and works its help eight hours a day, while the private publisher works his help ten hours a day. But the consumer is interested not in the actual first cost of the books, but in the cost to him.

"Since the State charges no manufacturers' profit, no jobbers' profit, and 'the retail dealer is allowed by law to charge no more than it would cost the pupil to have the books sent to him by mail (the retail dealer making only the difference between postage and freight), it follows that the consumer, or pupil, pays the private publisher, or his retail dealer, from thirty to sixty-six per cent. more than he is required to pay the State for his text-books."

COLORADO AND CONNECTICUT.

The School Reports of Colorado and Connecticut were not received in season to be considered in this part of the Report, but abstracts of them may be found at the close. See Index.

DAKOTA.

[From Report for 1886-87 and 1887-88 of the Territorial Board of Education of Dakota.]

GENERAL STATEMENTS.

The progress made in the educational affairs of Dakota, as shown by the statistical summary of the last five years, given in the report of the Territorial Board of Education, has been very rapid. This progress has been made by all grades of the schools, from the ordinary ungraded schools to the colleges and universities; and it has been a general progress, an increase in attendance and in amount of expenditures, a better quality of work, and longer school terms. School officers and teachers have worked harmoniously together to place the schools on a higher plane of usefulness, and we now find the outlook for the future most promising.

Less than one-fourth of the county superintendents made their reports within the time required by law, the difficulty being caused by a failure of township and district clerks to forward their reports promptly, and in many cases then they were inaccurate. If a Territorial fund were raised to be distributed among the districts when full and accurate reports had been made from them, it would soon remedy the evil. It would also be of much assistance to poor and unimproved districts. The annual salary of the district clerk should not be paid until he presented a receipt for his prompt report from the county superintendent.

Instead of a report being made by the board of education only every two years, it should be made annually, so that the matter contained in it might be fresh and of greater interest.

FINANCIAL CONDITION OF THE SCHOOLS.

The finances of the schools are generally well managed, and in this respect the schools are in a very prosperous condition. The amount of warrants outstanding is not large, and generally sell for almost their full value, while the bonds always sell for their face value and frequently above par. The warrants draw interest at eight per cent., and the bonds at from seven to eight per cent. The board of education has endeavored to get the schools to operate on a cash basis, and has discouraged the issuing of bonds, so that fewer bonds were issued during the last year than for many years previously. The interest on those issued is usually paid promptly, but in some cases it was neglected and caused complaint. On account of recent changes in the school law some uncertainty exists as to who is authorized to issue the bonds, and unless some action is taken on the matter by the Legislature the bonds will not command as good prices as they should.

DISCREPANCIES.

An examination of the reports of county superintendents for the last five years shows quite a discrepancy in the amount of money on hand the last day of the school year and the first day of the next year, although the amount should be the same; in most cases, too, the amount of money on hand is less than that reported as left over. The balance on hand June 30, 1884, was reported as \$296,000, but the amount on hand July 1, 1884, the next day, was \$262,000, showing a loss of \$34,000. The next year there was a loss of \$218,000, and the next year a loss of \$145,000, but on July 1, 1887, there was a gain of \$27,000. It is thought that these discrepancies are mostly due to carelessness and imperfect book-keeping, but it is quite probable that among the two thousand officers there are some dishonest ones.

As the amount of public money paid out for school purposes is larger than that for any other purposes, it should be required that a perfectly accurate account of it be kept. At present the township and district treasurers receive the money from the county treasurers and pay it out on the order of the clerk and chairman of the school board; but it would be better if it were the duty of the county treasurer himself to disburse all the school funds of the county, as that officer is usually a good financier and is placed under bond to discharge his duties faithfully.

SCHOOL LANDS.

The subject of school lands is one of the most important connected with the schools of Dakota. The number of acres is about two millions, with an estimated value of about ten millions of dollars, and as the time is drawing near when Dakota shall become a

State and the title to the lands shall be transferred from the National Government, the question of the management of the school lands becomes one of great importance; especially so when the history of school lands in other States is considered, for it is generally found to be a history of "extravagance, waste, fraud, and disappointment to the friends of education."

In many parts of the Territory settlements have been made on the school lands, and in others much valuable timber has been removed from them, and, unless some steps are soon taken to check these trespasses, so great will be the number of depredators that they will be able to influence legislation in their favor, and the public schools will be thus robbed of their resources.

If the school lands are sold and the funds invested for the benefit of the schools, the principal can never increase while the interest must gradually decrease; but if the lands are held by the State and leased out on long terms, the value of the lands would greatly increase and the school funds be thus augmented, and in no case could the loss exceed one year's income. This plan is strongly recommended by General W. H. H. Beadle, ex-Territorial superintendent of public instruction, who is better acquainted with the subject than any one else in the Territory, and it is fully endorsed by the board of education. In connection with these lands it should always be remembered that they were granted by the General Government for the benefit of the common schools; special grants having been made for universities, normal schools, and the agricultural college; that the lands granted to many of the other States have been sold and the money wasted, and it therefore becomes the people of Dakota to guard theirs with jealous care lest another dark chapter be written in the history of public-school lands.

SCHOOL-HOUSES.

There are four thousand one hundred and two school-houses in the Territory, with an estimated average value of about eight hundred dollars; the number of children of school age to each house, according to the latest estimates of the population, is twenty-eight. In school accommodations for its children, therefore, Dakota ranks with the first States in the country. Many of the houses, though, are not built with as much regard to the comfort and convenience of the pupils as the extreme cold and severity of the winter storms require. All of them should be built with a fuel pit or cellar beneath them so that it would not be necessary to leave them in severe weather to secure fuel.

The last Legislature authorized the department of education to "adopt the best plans and specifications for the construction of school-houses, and to furnish the same to the various school boards of the Territory, when needed, free of charge." Quite a number of urgent requests for plans were received, but as the Legislature made no appropriation to secure them, nothing could be done by the department. A small appropriation should be made for this purpose, and a saving of money in the construction of houses will result, as well as the insuring of better light, heating, ventilation, and sanitary condition.

EQUIPMENT OF SCHOOLS.

Sixty-one schools are without blackboards, and 1,034 without an unabridged dictionary. Two hundred and seventeen have school libraries containing 4,937 volumes. Local school officers have been encouraged to avail themselves of the provisions of the law regarding libraries, as it is thought that they will prove of great value to the children.

UNIFORMITY OF SCHOOL SYSTEM.

Seventy-six counties of the Territory have the township system, and fifteen the district system. The two plans have thus been in direct contact, and with the exception of the fact that the district brings the people into close relations with the schools, all the arguments are in favor of township districts. In the counties operating under the district system the law has been so obscured by enactments, repeals, and reenactments that it is difficult to determine what the law is, and many disputes have been occasioned. It is very desirable that the Legislature place these fifteen counties under the township plan like the other seventy-six counties.

SCHOOL TERM.

The average length of a school term in 1887-88 was one hundred and six days, three less than in the previous year, the decrease being caused by a failure of crops in a few of the counties. The highest average in any county was one hundred and forty-three days, the lowest was sixty-three days; but one hundred and fifty districts had no school at all. The law does not require the schools to be open any specified length of time, and in some of the districts the officers would not levy a sufficient tax to provide schools. It should be required that every district maintain a school for at least five months, and in case of failure that the county superintendent be empowered to do so.

COMPULSORY EDUCATION.

In 1886-87 the per cent. of children attending school was 83, but in 1887-88 only 81; hence it would seem that the compulsory law was a dead letter; yet there have been instances where the law has had effect, though it should have had much greater effect. An education is not intended simply for the benefit of the child and parent, but for the welfare of the State also, and so when public schools have been established by the State it has the right to require that all the children shall be educated.

TEACHERS.

The number of certificates of the first grade issued during the year 1887-88 was 246, of the second grade 1,442, of the third grade 2,153, and the number of applications rejected was 493. While the ratio of male teachers to female has been about the same for several years, the salaries of males have been gradually diminishing to that of the female teachers, showing that the latter are quite likely to prove themselves competent for the work. The standard of teachers has been raised very much, especially by the law of 1887, but it is thought desirable to maintain this standard for a time at least, and that sufficiently high wages be paid to get good teachers. On account of the low wages and shortness of the term, most of the teachers are required to seek other employment during the rest of the year.

STUDIES.

Of the 93,826 pupils enrolled only forty thousand have been studying physiology and hygiene. The law requiring this instruction has met with very little opposition, and it is probable that it will soon be very generally complied with.

Strong efforts have been made to introduce drawing into all the schools, and much attention has been given to it at meetings of teachers. There is a great tendency to crowd too many things into the school course, but it is thought that this branch can be made to occupy the attention of the pupils during leisure moments and be of much benefit to them.

According to the requirements of the law, the board of education, after getting all the information possible on the subject, prepared a regular course of study for common schools, including the high and normal schools, and forwarded copies of it to all the teachers and school officers. In the normal schools it proves quite satisfactory, and when it shall have been longer in the common schools it will probably prove very advantageous, especially in economizing time and force.

COUNTY SUPERINTENDENTS.

The influence upon the schools of a thoroughly qualified county superintendent is very great, and he can assist very much in making them a success. He should be the leading educator of the county, and in all cases should be required to hold a first-grade teacher's certificate, as it would be absurd to have a superintendent whose duty it was to examine teachers, but who could not pass the examination himself. Most of the superintendents in Dakota are men prepared especially for teaching, but in some cases incompetent ones are chosen, and the board of education should have the power to remove such. The term of office of county superintendents should be made longer. "A good man is barely able to get his work organized till he is called upon to give it up or seek a new election. He should be allowed a larger salary by law, and relieved in a measure from the restraints frequently placed upon him by the county commissioners. He has an important work to do and he should be given the opportunities to perform his duty well, and receive a just compensation for it. When township school boards fail to provide the duration of school required by law, he should have authority to step in and provide it. In many ways his authority in school matters should be extended and his position backed up. He is the most important officer in the whole educational machine, and though laws may to some extent destroy his usefulness so long as he exists at all they can not destroy his influence. In all that looks to real advancement in education he must be the leader, no matter what the work or influence of other officers. Every possible safeguard should be thrown around his election, and he should be removed as far as possible from partisan politics."

TEXT-BOOKS.

While nearly all the States and Territories have laws regulating the use of text-books in the schools, the Legislature of Dakota has done nothing at all with reference to it. It would prove highly advantageous if it were required that a uniform series of text-books be used throughout the entire Territory, and the Legislature should pass a law requiring uniformity in the townships at least, and that when a series has been adopted it should not be changed in less than five years; and when this has been enacted the different township officers can hold a convention and adopt a common system, and thus secure uniformity throughout each county.

FOREIGN LANGUAGES.

The law requires that the common schools shall be taught in the English language; but some instances came to the attention of the board of education where the teacher was not even able to speak the English language, and nothing could be done about it, as the foreign element was so strong that they not only controlled the schools but the election of county superintendent also, and a strong public sentiment was created in support of the schools taught in a foreign language. The board of education recommends that it be authorized to remove any county superintendent who refuses to enforce the law on this subject.

RECOMMENDATIONS.

The following recommendations are made to the Territorial Legislature:

That the fifteen counties now operating under the district system be placed under the township system.

That the county treasurer be made *ex-officio* treasurer of the several school townships of his county.

That a general board of control be established to have charge of the various public educational institutions for higher and special instruction.

That the law relating to the issuing of bonds by school townships be so amended as to authorize the clerk and chairman of the school board to execute the bonds instead of the clerk and director, no such officer as director having been established.

That a law be passed to prevent trespasses upon the school lands.

That a general territorial tax be levied for the support of schools, to be distributed to the several counties in proportion to the school enrolment.

That the clerk of the township school board be required to hold a receipt from the county superintendent that his annual report has been correctly made and delivered before he shall be allowed the last half of his salary.

That an appropriation be made to secure plans and specifications for school-houses, and that it be required that school-houses be built according to them.

That a uniform law be passed regulating the out-houses of the rural schools.

That each school district be required to maintain a school for at least four months each year.

That first-grade teachers' certificates be valid for three years and entitle the holders to teach in any county in the Territory.

That the board of education be authorized to enforce the course of study prescribed by law.

That each director of the subdistricts be allowed two dollars for each quarterly meeting he attends.

That the appropriation of \$50 per county for institute purposes be changed to an appropriation of \$4,800 per year for the employment of four institute conductors for the Territory, and that an additional appropriation be made to cover their expenses.

That a normal school for North Dakota be established.

That the law relating to the powers of the subdistrict directors be so amended as to leave the entire control of the schools and the employment of a teacher to a township school board.

That it be made a misdemeanor for a clerk and chairman to execute any contract unless previously ordered so to do at a regular meeting of the board, or at a special meeting called according to law. Directors should be prohibited from signing any contract or agreement for furniture or fixtures at any time.

That the county superintendent be elected for four years; that residence in the county not to be required, but that a minimum standard of qualifications be established, and that he be subject to removal by the Territorial board of education.

[From the Report of the State Board of Education to the Governor, 1888.]

"The progress of education during the year ending June 30, 1888, has been very satisfactory; indeed, it is not too much to say that it has been gratifying beyond anything that we had expected. It is safe to affirm that during no year of our entire educational history has so great an advance been made in all that pertains to the real work of education, no matter in what line considered. Although the reports from local officers to this department are not all in, enough is known to bear us out in saying that the number of school-houses built, the amount of money raised in the Territory for school purposes, and the number of children of school age in the Territory show a healthy and vigorous growth. But the results of the year's activity is not shown in statistics altogether, but rather in an awakened interest in all that pertains to education, in a more cordial public support given our educational workers, in larger enthusiasm in the teaching force, in an increasing number of pupils in the higher and special schools, and lastly,

though not least, in the convergence of all lines of educational work toward one general system of schools for the Territory. Our people are looking more to the kind of training their pupils are receiving. Our teachers are becoming more professional, and are putting forth much greater efforts to prepare themselves for efficient service, as is attested by a greatly enlarged attendance upon the teachers' institutes, associations, and normal schools. The people generally take a lively interest in school affairs, and are proud of our educational progress and standing, and are each year making greater efforts and sacrifices in behalf of our school system. There is no demand made upon them that is so readily and generously supplied as the demand for funds for school purposes. We have reasons to be satisfied with the present and hopeful for the future."

CITY GRADED AND HIGH SCHOOLS.

"Great progress is being made by the principal cities in the Territory in matters pertaining to education. Fine and substantial buildings are being erected, and all the apparatus and appliances are being provided that are necessary for thorough school work. Skillful and experienced teachers are being sought in the educational centers of the East, and modern methods are adopted in all of the schools. Good salaries are usually paid, and tenure of office of both principals and teachers is becoming more permanent."

SCHOOL LANDS.

"No subject incident to the school affairs of Dakota is of greater interest and importance to her people than the subject of school lands. Hon. P. F. McClure, commissioner of immigration of the Territory, estimates the number of acres of school lands at three millions, and the estimate is a low one. At the very moderate valuation of six dollars per acre these lands represent a magnificent school fund of eighteen million dollars. If this sum were at the present time paying five per cent., the annual income from this source would be nearly sufficient to cover half the total expenditures for school purposes in Dakota. In their present condition the schools are deriving no benefit from them. Although the lands of the Territory generally are rapidly increasing in value, in many places the school lands are depreciating in value. Unoccupied lands in the eastern part of the Territory are becoming very scarce and the pressure of settlers is very great, so that much of the school land is occupied and cultivated. It is not a rash estimate that puts the portion of the school lands now cultivated at one-fourth of the whole. Each crop taken from them is impoverishing the land and diminishing its value, for the cultivator is anxious to get all he can from it without making any return to the land and with the least possible care of it. Many sections through this neglect are growing up to noxious weeds and will soon be in a condition that will make them valueless to any one. We would earnestly urge the Department of the Interior to take such steps as may be deemed wise to prevent further despoliation of these lands, that the people of this Territory, in whose behalf they have been set aside, may receive them undiminished in value. We would most respectfully advise that Congress take action authorizing their rental for the benefit of the schools of the Territory. In many parts of the Territory the lands would readily rent at the rate of from fifty cents to one dollar per acre for grain-raising purposes, while the unbroken sections would be easily disposed of at a fair rent for hay and pasture, and the value to the new State remain undiminished. We believe that such a disposal of them would meet the universal approval of our people. In a new country like this the demands upon the people that must be met by way of taxation are very numerous and burdensome. In some counties the rate of levy for school purposes alone is 27 mills, a tax that would not be levied or borne in many of the older and more wealthy States. Many of the people have come here to make homes, and have brought little capital with them besides their courage and energy, and the burdens of taxation are very grievous. A small income now from the school lands will be far more helpful to them than four times the amount ten years hence. We would, therefore, respectfully urge that immediate steps be taken to prevent further waste of the school lands and to give the people of the Territory some present benefit from them."

DELAWARE.

[From Report for 1883 of A. N. Raub, President of the State Board of Education.]

GENERAL STATEMENTS.

The president of the State board of education thinks that it was the intention of the framers of the law of 1887 that a biennial report should be made by the State board of education on the first Tuesday of December, 1888, instead of in 1889; and he has acted upon this presumption.

Great difficulty has been experienced in collecting full and accurate statistics under

the new law, as its requirements are so meagre and the incorporated boards are under no obligation to furnish statistics to the county superintendents.

It is not deemed advisable to recommend the adoption of a law for compulsory school attendance, as it would probably prove inoperative and unpopular.

COUNTY SUPERINTENDENCY.

The law establishing county superintendency proves to be a very wise one; the superintendents appointed by the Governor have discharged their duties faithfully and conscientiously. The schools have been regularly visited by them, and the examinations carefully conducted; they have held annual county institutes in which thoroughly qualified instructors were employed, and from which the teachers doubtless received great benefit.

The term of office of the county superintendent should be at least two years, and it would be better if it were four years; and the superintendent should be required to possess special qualifications and experience in teaching.

TEACHERS' CERTIFICATES.

According to the present regulations, a candidate who answers sixty per cent. of the questions given at a teachers' examination is entitled to a third-grade certificate which is valid for one year; but to obtain a second-grade certificate, which is only valid for two years, it is necessary to answer ninety per cent. of the questions. In most of the States the ability required to obtain this second-grade certificate would entitle to a certificate practically good for life. Correct answers to eighty per cent. of the questions should entitle to a second-grade certificate.

The law as to first-grade certificates is somewhat indefinite; but it requires that the applicant shall be qualified in certain specified branches, and the certificate is valid only for three years, presumably in the county for which it was issued. It should be valid throughout the State, and should be renewable every three years by the county superintendent.

Certificates valid for life should also be issued to those who had held first-grade certificates and had taught successfully for a certain number of years, as this would prove an incentive to teachers to make teaching their life-work, and would elevate the profession.

It is thought, too, that the life certificates of other States should be recognized in Delaware if a like courtesy were shown in other States to the holders of life certificates issued by Delaware.

THE HUNDRED SYSTEM.

The efficiency of the schools would be very much increased by abolishing the school districts and making the hundreds, as at present constituted, the school units; thus adopting what is called in the western States the township system. Or a modification of this system might be adopted by dividing the hundreds into incorporated boroughs and rural districts.

One advantage arising from this system would be that a high school might be established in each hundred.

TEMPERANCE INSTRUCTION.

The law requiring instruction in temperance and hygiene is faithfully observed, but it cannot be expected that a law so loosely worded can effect much in a short time, as the instruction may be given only once a week or even once a month.

FREE TEXT-BOOKS.

A law should be enacted permitting each district to furnish free text-books to its pupils, as it gives eminent satisfaction wherever it has been tried, and when once adopted is never abandoned. It would secure books at less cost, and increase the attendance of pupils, as indigent pupils would not be kept at home on account of the expense of furnishing them with books; it would secure a better classification of pupils, and obliterate class distinctions.

INCORPORATED SCHOOL BOARDS.

According to the present laws, schools having incorporated school boards have no supervision except that given by the commissioners, and their teachers are exempt from examination. It would be better if all the schools of a county, except those under special superintendents, were placed under the county superintendent.

NORMAL TRAINING.

Delaware, like most of the other States and of the Territories, should have an institution for the special training of teachers, and a diploma from it should entitle the holder,

after some years of successful experience, to teach without further examination. "Teaching will in time be recognized as a profession if teachers be trained in their work, and we ought to do for the Delaware teachers what other States are doing for theirs. Many of our brightest young men and women drift to the State Normal Schools of other States for their training, thus expending thousands of dollars abroad that ought to be made to contribute to the prosperity of our own State. But a possibly worse feature is the fact that most of these teachers remain in other States after receiving their training, and teach where their diplomas are recognized as valid without further examination. Our State thus loses many good teachers whose services are needed at home."

RECOMMENDATIONS.

Provision should be made for taking a census of the school population at least every two years. At present it is impossible to ascertain what per cent. of the children of school age are attending school.

An "Arbor Day" should be established. The Governor should be authorized and requested to appoint a day, not later than the first of March in each year, to be spent by the pupils and their friends in adorning the school grounds and their homes by the planting of trees and shrubbery.

The members of the State board of education receive no salary for their services, but they should at least receive sufficient compensation to cover the necessary expenses of stationery, travelling, etc.

DISTRICT OF COLUMBIA.

[*Report of Board of Trustees for 1887-88.*]

The committee of the board of trustees state that a very hopeful advance was made by the schools of the District during the year 1887-88; that the appropriations made by Congress during the two preceding years had done much to overcome the great need of the public schools, increased accommodations for the pupils; but still the two most urgent wants of the schools, in order to secure their complete success, are increased accommodations for the pupils of the high schools and more liberal salaries to the teachers.

ATTENDANCE.

The total enrolment of pupils in the public schools during the year was 34,850; the average enrolment 28,553; showing that the enrolment during each month of the year was, on an average, 6,297 less than the entire enrolment. The census taken by the police in June, 1888, showed the whole number of children of school age, six to seventeen years inclusive, to be 51,500; number enrolled in the public schools, 34,850; in private schools, 3,119; total enrolment, 37,969. The difference between the school population and the average enrolment in the schools was 20,389. This can be accounted for to a large extent. Many children that have been enrolled leave the city and thereby leave the schools; many of the older pupils leave the schools to enter upon some business of life; some leave because of sickness or death. But, after making due allowance for all these, a large number of absences are unaccounted for.

The question then arises, In what way can the public schools help to overcome this non-attendance? In the first place, ample provision should be made for pupils in comfortable, well-lighted, and well-ventilated buildings where they could receive full attention during the whole school day, instead of for two or three hours in the morning or afternoon.

In the second place, the school should furnish efficient and interesting work, suited to the capacities of all the children, and such as they see will be of help to them in their life-work.

It was noticed during the year that a large number of children within reach of the rural schools were not attending, and so the teachers made visits to their parents to induce them to send their children to school; and, as a result, the schools were soon filled with children who had been remaining at home simply on account of the indifference of parents or children. In a few cases, however, it was found that the non-attendance was occasioned by inability to buy books or proper clothing.

TRUANCY AGENT.

It is thought that if there were a truancy agent whose duty it would be, under the direction of the superintendent or other authority, to seek out the absent or tardy children, that the school attendance would be very much increased without the necessity of resorting to arbitrary compulsion. A truant law without a truancy agent would prove a failure.

VENTILATION.

Upon this subject Superintendent Powell says: "The school-rooms that have been provided during the last ten or more years are cheerful, thoroughly ventilated, and healthful. I am glad to be able to say the system of ventilation employed ventilates, and ventilates in spite of the preoccupation of the teacher or of the janitor. In respect of heating, lighting, and ventilation, nothing more is to be desired in the new buildings. Some of our older buildings, however, although fine, imposing structures, are poorly ventilated or are not ventilated at all. The more prominent of the former are the Franklin and the Jefferson; of the latter, the Wallach and the Cranch. Nothing, to my mind, should be urged more strongly, save only additional accommodations, than the improvement of the ventilating processes in the buildings named and in a few others. So easily may this be done, and at such a trifling expense comparatively, with the knowledge now possessed, that I should feel myself remiss did I fail to call your attention to this most urgent need and thus emphasize the suggestions of my co-laborers."

HIGH SCHOOLS.

The attention of the Commissioners of the District of Columbia is again most urgently called to the needs of the high schools, both of the colored and white children. The colored high school is situated in an extremely inconvenient locality for the greater portion of pupils attending it; it is poorly adapted to the purpose, and all the accommodation which it affords is urgently needed to meet the demands of the section of city in which it is located for schools of a lower grade.

The necessity for increased accommodations for the Washington High School was presented to the Commissioners in the last report, but as it was necessary to make additional provision for the primary schools also, the preference was given to the latter, and the high school was neglected; and, as was predicted by the trustees, a large number of children, entitled to admission by proficiency and deportment, made application, but on account of the limited accommodation three hundred and ninety-eight pupils, out of a total attendance of nine hundred and ninety-seven, could only receive instruction during one-half of each day. It is estimated that the total attendance during the current year will approximate twelve hundred pupils with accommodation for about seven hundred and fifty, and unless additional room is provided, it is probable that in another year all the pupils will be limited to half-day sessions. It is, of course, an injustice for some pupils to be limited to a half-day at school while others attend the full day's session. Full and effective work can not be done by either teacher or pupil where the instruction is limited to the short space of time devoted to recitations. In the high school, each teacher gives instruction in a particular branch to each class studying it, and when a class has recited to one teacher it goes to the room of another; hence it is necessary that all the teachers be in the same building.

It is worthy of special note that a much larger proportion of the boys and girls of this city continue their studies until they have entered the high school than is found to be the case in scarcely any other large city.

There are three courses of study in the high school: An academic course, a scientific course, and a business course; the first two requiring a period of three years, and the last a period of two years for completion of the prescribed work.

PHYSICAL TRAINING.

"The manual training now given to boys, together with their active and varied sports, afford much exercise for them. The industrial work for girls and their sports are less beneficial, afford less of vigorous exercise. Neither the industries nor the sports insure that systematic physical training or cultivation that is desired.

"Exercise is not cultivation. Exercise specifically directed and methodically taken results in cultivation.

"Calisthenic exercises are now employed by some of our teachers but not by all, and, I fear, not by many. The work done by these is apt to be spasmodic, and not being continued by the succeeding teacher of the school, is of little value comparatively."

"The good effects of the military drill given to the boys in the high school are apparent, whether the boys drill, march in military garb, walk across the school-room, or sit in recitation. These results are obtained by methodical exercises, each of which is had for a definite purpose. The lack of corresponding training is noticeable in the movements not only of girls in the high school but also below the high school, but the painful manifestation of the lack of physical cultivation is the absence of vigor and the presence of lassitude.

"The exercises of the school should be an alternation of mental and physical effort, both of which to be most profitable must be specifically directed and methodically done. If during the physical exercises the perfect ventilation of the room is assured, the school

would become a place to be sought and attended for health and physical cultivation, as well as for mental growth and improvement.

"I suggest the employment of two or more teachers of health exercises. These teachers would occupy the same relative positions that are held by the teachers of drawing or of music, and would do their work in a corresponding way. Pupils might by this means be trained systematically in manual exercises as well as in vocal exercises by the special teachers visiting the schools at stated intervals to give the instruction; the regular teacher repeating and supplementing the exercises for recreation and cultivation during the intervals of absence of the special teacher. Such exercises would help in the reading lessons, in the music lessons, in the drawing and writing lessons, and would give health and grace to all the children."

LIBRARIES AND APPARATUS.

It has been the constant aim of the teachers to reduce the didactic *memoriter* methods of instruction to the lowest, and to substitute examinations and investigations in the library and laboratory. For this purpose, there is need of suitable reference books and libraries containing historical, biographical, and scientific works, to which the teachers and pupils can have ready access; and there is need also of objects for investigation and illustration; so that pupils shall not always be required to examine books to obtain information. The demands upon the contingent fund for other purposes, as for instance the supplying of rented buildings with seats, have been so great that little help could be given from this source. In some instances money was obtained to supply these wants by giving concerts, by contributions, etc.; but it cannot be expected that much will be accomplished in this way.

SALARIES OF TEACHERS.

At present the prescribed average salary is \$670 per annum, and the board of trustees unanimously recommends that it be increased to \$685 per annum. The salary of messengers in the departments of the Government is \$840 per annum, and that of assistant messengers is \$720, in both cases the salaries being higher than that of the cultivated teachers of the District who were required to spend years in preparing for their work.

The proportion of children in the schools of high grade is much larger than in most other cities, and consequently more teachers of high attainments and experience are needed, and their salaries should be higher.

The appropriations of the last three years for school purposes have been accompanied with a restriction forbidding an increase in the number of teachers in any grade receiving \$900 or more. It is earnestly recommended that, if any restriction at all of this kind is needed, the limitation be \$1,200 instead of \$900.

The number of pupils in the eighth grade and in the high schools has greatly increased in the last few years, so that more teachers have become necessary for their instruction, but teachers of sufficient attainments to fill these places, and who have had experience, can obtain larger salaries; consequently several of the best teachers have resigned to accept situations elsewhere, and it has been found necessary to employ young college graduates who, in many cases, possessed fine ability, but who were entirely without experience.

MANUAL TRAINING.

"The school year was marked by the formal introduction of manual training into the curriculum of the public schools of the district.

"Every thing done in this branch of education was done with the purpose, ultimately, of adding the different parts thereof to the course of instruction and introducing them into their respective grades of school throughout the district. The appropriation for manual training, \$5,000 (for plant only), was such that this could be only partially accomplished the past year.

"That the value and practicability of the work might be tested it was engrafted in its entirety on the schools of a portion of the district. For instance, carpentry work, cooking, and sewing were introduced into all the schools of the third division in which it is proposed to teach these subjects respectively.

"A corresponding introduction of these studies was made in some schools of the second and fourth divisions and also in the high school."

"Throughout the district, at this writing, sewing teachers, eight in number, teach classes of girls of the fourth, fifth, and sixth grades. Seven thousand girls are taught plain sewing, running, hemming, felling, darning, and button-hole stitch, etc. This work has served a double purpose—the one for which it was designed (that of giving instruction in sewing), and another, that of increasing the interest in other school work. It refreshes and invigorates; it introduces a marked change which breaks up the oft-time dull routine so destructive to the spirit of real intelligent work.

"Two thousand girls from the seventh and eighth grades and from the high school

receive instruction in cooking at the hands of nine teachers. Each cooking-school has for its use a kitchen and a mixing-room complete in their appointments. Each is also supplied with blackboards for the representation of many of the food substances which, without such aid, would be less thoroughly understood. Instruction is given on food materials—their nature, sources, effects on both body and mind and consequent relative values. Much of the work makes application of the physics regularly taught in the schools. This, with the thorough study of food materials, the experiments, observations, and inferences made by the pupils, gives the work in cooking a scientific and at the same time a practical basis."

"Twelve teachers are required to teach seventeen hundred boys from the seventh and eighth grades from the high school. The course commences with the seventh grade. It includes the correct use of tools, the laying out of the work, with the aid of knife, pencil, and try-square, and the making of chamfered blocks, mouldings, and various T-joints. Simple special pieces are made, such as tool-racks, shelves, and squares for school-room use. Towel-racks and steps for the cooking-schools are successfully undertaken. Originality is developed by designing and by making objects which are constructed from original working drawings. The eighth grade shows more difficult constructions than the seventh.

"In the high schools many articles of school furniture are made for the laboratories, the cooking-schools, and the other schools."

It must not be supposed, however, that the important and, useful information here given can be lightly obtained; for manual training must necessarily add to the cost of the schools. The entire cost of manual training for the past year was \$2.27 per pupil; making the cost of the school (per pupil) without manual training \$18.80; with manual training, \$21.07.

KINDERGARTEN.

Superintendent Powell regards the kindergarten as one of the most important introductions into and changes of the school system, and he recommends that two or three more be established in those parts of the city where the mothers are required to go from home to engage in their work.

FLORIDA.

[From Report for 1888 of State Superintendent Albert J. Russell.]

GENERAL STATEMENT.

Schools for the instruction of white and colored youth are now established in all parts of the State; and, according to the school census of 1888, over seventy-two per cent. of the children are attending them. As the older freedmen are passing away, and the children of both whites and blacks have now had the advantages of schools for several years and have availed themselves of them, the cloud of illiteracy is fast disappearing. Teachers and school officers have joined heartily in their efforts to make the schools successful.

PROGRESS OF THE SCHOOLS.

Since the school census of 1884 was taken there has been an increase of thirty-nine thousand in the number of children of school age, six to twenty-one years of age. The increase in total attendance has been 24,012, and in average daily attendance 17,249. The number of schools in 1888 was 2,249. Neat, comfortable, and well-furnished school-houses have been gradually displacing the old log houses; and in the cities and larger towns many large, commodious buildings have been erected. In 1882 there was an expenditure for school purposes of about \$117,000; in 1888 the expenditures amounted to over \$484,000, an increase of more than \$366,000.

EQUIPMENT OF SCHOOLS.

In several counties of the State the schools are well supplied with maps, globes, charts, and other apparatus for the practical illustration of lessons; but in other schools there is a great lack of these articles so essential to good school work.

CONVENTION OF SUPERINTENDENTS.

A convention of county superintendents was held at De Funiak Springs and was attended by the superintendents of seventeen counties. These found much to interest, instruct, and encourage them in their work.

INDUSTRIAL TRAINING.

The State board of education made earnest efforts to secure the introduction of industrial training into the public schools, and met with considerable success, as industrial training is now taught in the normal colleges and in many of the larger city and village schools.

PRIVATE SCHOOLS.

According to the reports of the county superintendents there are now 137 colleges and private schools in the State, all of which are in a prosperous condition.

ARBOR DAY.

The 8th day of February, 1888, was appointed by the Governor as a suitable time for Arbor Day. The reports showed 450 schools with 18,542 pupils participating, 4,408 patrons and friends present, and 7,490 trees planted. All the people seem to appreciate and take great interest in the observance of such a day, inculcating as it does the importance of preserving and planting trees and flowers, and of beautifying school grounds.

TEMPERANCE INSTRUCTION.

Among other regulations prepared by the State superintendent of public instruction and adopted by the State board of education was the following: "The evil of intemperance abroad in the land demands the attention of all true men and women everywhere, that its tide may be turned back and the great social evil abated; therefore, the State board of education calls upon all county superintendents and county boards of public instruction to see that the pupils are, from time to time, as the regular work and duties of the school will permit, impressed with the evils flowing from the use of intoxicants and narcotics morally, physically, socially, and financially, so that a wholesome conception of the evil and ruin wrought by them may be had by every pupil."

GEORGIA.

[From Report for 1887-88 of State Superintendent James S. Hook.]

Superintendent Hook in the opening of his report pays a worthy tribute to the memory of his distinguished predecessor, Dr. Gustavus J. Orr, who for nearly sixteen years was in charge of the public education of Georgia and who died with his armor on, falling like a true and valiant soldier at his post. His was a life consecrated to noble and untiring efforts to advance the educational interests of Georgia; and he may be said to have sacrificed himself to the behests of duty, striving ever, as he did, with exalted purpose, unflinching zeal, and untiring energies to meet the onerous labors of his office and secure for the people who confided to him the honorable trust the highest attainable moral and intellectual development and advancement. He has left the bright impress of his noble work upon the public school system of Georgia.

COMMON SCHOOL SYSTEM.

Whatever opposition may have existed in the past to a common school system, it is now universally admitted that every child in the State is entitled to receive full instruction in the elementary branches of an education which will enable him to engage successfully in the trials and duties of life.

"So far as our State history in reference to education discloses, the principal trouble here in the way of State aid for many long years had its origin in the adjustment of the *modus operandi*, and not in any spirit of opposition to the principle and policy. From our earliest existence as a State, the need and vast importance of general education were felt, and in various ways, and through very able, distinguished, and influential sources fully declared. The free school and poor school systems of the past, though doubtless well intended by their projectors, were found to be failures for several reasons, but chiefly because of the honest and just pride of honorable poverty, which naturally felt sensitive over the line of distinction thus drawn between the children of the rich and the children of the poor. No system could be effective and popular that excluded the sensitive poor from its benefits."

This serious obstacle to public education was early recognized, and the Legislature was advised time and again by the different Governors of the State to remedy it.

"Now that our State, after years of anxious solicitude in behalf of popular education, has reached and adopted an educational system of perfect equality, adapted to the wants and conditions of all, without grating upon the sensibilities or wounding the just pride of any—a system full of wisdom and designed to give every child in the State, rich or poor, white or colored, a liberal elementary education, the grave question, how shall this system be sustained and made to dispense its untold and unspeakable blessings to our

whole people and to coming generations, presents itself at the threshold and demands wise legislative solution and prompt action."

LENGTH OF SCHOOL TERM.

The superintendent urges that the common schools, instead of continuing for the short term of three months, shall be open for six months, and this would leave sufficient time for the pupils whose circumstances require them to labor during a portion of each year. In order to maintain the schools for six months it would be necessary to secure \$1,260,000, besides the cost of operating the system, which would be somewhat greater than at present. Different methods are suggested by which the amount could be raised, the first being by an assessment of two mills, if the people would consent to additional taxation. If not, then it is claimed that the income from the State Road belongs to the school funds. Also that the bonds issued in 1858 for a school fund, amounting to \$350,000, and which were afterwards destroyed, still constitute a just debt against the State.

LOCAL TAXATION.

A large number of the towns and school districts would be willing to impose a local tax upon themselves for school purposes, and it is suggested that the Legislature pass an "educational local option law" by which this could be done. If good country schools were established in every neighborhood, many of the citizens who now find it necessary to send their boys and girls off to towns and cities for an education would be spared this expense. Atlanta and other cities and some of the counties have already been authorized to impose local taxes, and it is suggested that a general law on the subject be enacted.

PRIVATE SCHOOLS.

The number of private high schools was 104, and of private elementary schools 718. The latter employed 804 instructors and had an attendance of 21,271 white children and 6,197 colored. No reports of private high schools were received from ninety counties, and of elementary schools from eighty-one counties, so the number of such schools was really much greater than at first seems.

THE CONSOLIDATED SCHOOL LAW.

Considerable doubt existed in the minds of a great many teachers and school officers as to the effect of the new school law enacted in 1887, "To amend, revise, and consolidate the common school laws of the State of Georgia, and for other purposes." A circular was issued by Superintendent Hook giving full information as to his understanding of its effects.

TEACHERS' EXAMINATIONS.

The new school law required the questions for the teachers' examinations to be furnished by the State school commissioners, and in some counties of the State difficulty was found in obtaining a sufficient number of teachers possessing the necessary qualifications. A large number of applications for State licenses to teach were made to the State superintendent and ninety-six were granted. Most of them were to white teachers, but quite a number to colored teachers who were highly recommended by their respective county school commissioners, and whose examination papers evinced fine qualifications.

SCHOOL CENSUS.

An enumeration of the school population was made during the year, which showed the population from six to eighteen years of age to be: white, 292,624; colored, 267,657; total, 560,281. "This work was more slow in its accomplishment than was anticipated, but the returns, which we have thoroughly examined, show the work to have been carefully done, and the tables we furnish may be regarded as accurate and correct."

IDAHO.

[From Report for 1886-87 and 1887-88 of Territorial Superintendent Elias W. Moody.]

GENERAL STATEMENTS.

The evidences of progress in the educational interests of the Territory are very striking. While there has been great increase in wealth and population, the schools have experienced a growth equally great. In 1870 the total number of children of school age was only 888; now it is 20,130. In that year only \$9,226.06 were expended for education; during the year 1887-88 over \$138,662.56 were expended. The number of schools has greatly increased, and the number of teachers who have undergone special instruc-

tion for their work is much larger than heretofore. The law creating the office of county school superintendent, separate and distinct from that of county auditor or probate judge, has had very beneficial effects upon the schools and has secured much better supervision of them.

There are numerous private and sectarian schools scattered throughout the Territory from which no information has been obtained.

The Indians in the Territory have good schools, and those of them who have been educated at the Indian training-schools are growing up and beginning to influence very much the Indian character.

REPORTS OF SCHOOL OFFICERS.

The counties are so large that it is impossible for the county superintendent to visit all portions of them and obtain by personal observation the necessary information concerning the schools. He is compelled to rely upon the local school trustees for this information; but as these officers are chosen at a popular election they are frequently men of no education, have no interest in schools and never visit them; consequently it is impossible to obtain accurate and reliable school statistics from them.

SCHOOL ACCOMMODATIONS.

There has been such an increase in the school population and school attendance that the buildings are entirely inadequate to the comfortable accommodation of the pupils. In many cases from fifty to seventy children are crowded into rooms where provision had only been made for thirty or forty. This, of course, interferes very much with the good order and progress of the school, as well as endangers the health of the pupils. In other cases it was found necessary to divide the pupils and let each division come at a different time of day, and in still others the plan of dividing the district was tried, which is not desirable. In some districts the houses belong to different religious societies.

In all the new school-buildings much attention is given to proper ventilation, light, and heating; but in the old school-houses much improvement can not be made in this respect.

The chief difficulty in obtaining a sufficient number of suitable school buildings is a want of funds, caused by the unwillingness of the county commissioner to levy more than the minimum tax of four mills. In the new communities, where land is not yet patented, only the improvements and personal property of the settlers are taxable, and these are never assessed at more than one-half of their real value, so that a tax of four mills is only equivalent to two mills on the real value of the property. The school fund suffers a loss now from the payment of collector's fees, which the "salary bill" passed by the Fourteenth Legislature seemed to authorize, but the general school law forbids the receiving of such fees. If it should be deemed proper that a collection fee be retained, it should be paid out of the current fund of the county and not out of the school fund.

Not only is there an insufficient number of good school-buildings, but it was found upon inquiry of the county superintendents as to the number of schools supplied with water-closets that a disgraceful state of affairs existed in this respect and without excuse, but an improvement has now been made.

DISTRICT BOUNDARIES.

On account of the Territory being settled before government surveys were made, the school districts were bounded by mountain ranges, creeks, canyons, etc., so that it is often difficult to know the exact boundaries, and there results confusion in getting an accurate school census and in levying special district taxes.

TEXT-BOOKS.

The adoption of a uniform series of text-books for each county gives general satisfaction to both teachers and patrons. Every county in the Territory has adopted a series.

TEACHERS.

Some trouble was caused during the year by the demand of reputed leaders in the Mormon Church that the schools in Mormon districts should be taught by teachers of that faith or else the children would not be allowed to attend. The trustees refused to comply with these demands, claiming that under the provision of law forbidding that certificates be granted to any but law-abiding citizens and persons of good moral character, they would not be justified in licensing any member of an organization which teaches or encourages bigamy or polygamy. While some parents may have kept children from school at first on this account, it is probable that their opposition gradually gave way.

The law permitting teachers who have taught five years in any one county to teach

after that time without further examination should be repealed; for very great improvements are made in the methods of teaching, and the standard of teachers' qualifications is raised from time to time, so that an occasional examination should be required of all teachers. The requirement that teachers shall be examined in geology keeps out of the profession some who are otherwise fully qualified to discharge its duties.

COMPULSORY EDUCATION.

The enactment of the Fourteenth Legislature to secure compulsory attendance was very defective, and while some of the superintendents report it as having been enforced, others state that it has been a dead letter upon the statute book.

SCHOOL LANDS.

Of the seventy-two sections authorized by Congress to be withdrawn for the benefit of the university, all but 1,906.15 acres have been selected. Sections sixteen and thirty-two of each surveyed township have been set apart for the common schools, but no authority for their disposal or management has been given any of the Territorial officers, and unless this is done by Congress, they must lie idle until the Territory is admitted as a State. Many of these tracts are situated in thriving and populous communities, and, under a management of school officers, might be made to yield considerable revenue.

ARBOR DAY.

The Legislature passed a bill making the last Monday in April a legal holiday, so as to encourage the pupils in setting out trees and in other ways beautifying their school-grounds. A programme of exercises suitable to the occasion was issued by the State superintendent, together with essays by prominent writers as to the importance of inculcating in the children a high appreciation of the benefits conferred by forests and the necessity of their preservation. On account of the difference in climate and altitude, however, it was found that the date did not suit some localities, and in some places no trees were planted because there were no fences to protect them from stock. But in many instances the day proved to be a most happy and profitable one.

DAMAGE TO SCHOOL PROPERTY.

Under the present criminal code of the State, any one injuring school property in any other manner than by fire can only be punished for a misdemeanor, and it is necessary that severe punishment be visited upon those doing such damage. One case particularly is mentioned where a school-house had been erected by the voluntary labor and contributions of good men, but which was badly damaged by lawless persons.

TEMPERANCE INSTRUCTION.

The act of Congress requiring instruction in the Territorial schools as to the effects of alcoholics and narcotics upon the human system has been generally enforced. Some of the teachers state that it is impossible to comply absolutely with the letter of the law, and in some communities it could not be enforced on account of the strong opposition among the people; but every possible effort has been made to have it enforced, and school officers have been informed that no teacher could be employed in the public schools who refused to comply with this law.

RECOMMENDATIONS.

The superintendent recommends: That the clerk of the board of trustees be made school census marshal, and that the fee for enumerating children be reduced to five cents per capita.

That all persons qualified to vote at general county elections be entitled to vote on all matters pertaining to the schools.

That districts be forbidden to incur any debt, other than bonded indebtedness, beyond the amount of money actually on hand for its payment, so that the teachers may not be required to wait for payment of their claims.

That the acts creating the independent districts of Lewiston and Boise City be so amended as to place them under the same supervision as the other schools.

That the salary of the State superintendent of education, which is twelve hundred dollars per annum, be increased to a reasonable amount.

[From Report of the Territorial Superintendent to the Governor, 1883.]

"The difficulties of preparing accurate tables of statistics have been greatly increased through the neglect of the district trustees to properly perform their duty in promptly forwarding reports required by law. Our school law seems to be defective in not providing suitable means of enforcing the performance of that duty, and inasmuch as the

neglect of one district renders all reports incomplete and places it beyond the power of those charged with the duty of preparing statistics to do so in a satisfactory manner, some remedy should be provided by the Legislature.

"Ours is a 'district school' system, the affairs of each district being under the immediate control of a board of three trustees, elected by the people of the district, and whose duties are to employ teachers, fix their salaries, and to visit the school once each month, together with the other duties usually incident to the office named.

"Each county of the Territory has a school superintendent, to whom the trustees must annually report, and who, with the county auditor and treasurer, manages the school fund. He has the usual powers of county superintendents in the Eastern States; must visit each school annually, examine candidates for teachers' licenses, and enforce the provisions of the law concerning the carrying on of the school affairs of his county. He must render annual reports to the Territorial superintendent, showing the condition of the schools of his county. Such reports are not due until the first day of November of each year."

SCHOOL-HOUSES.

"Since my last special report for 1887 I have reason to think that there has been an increase in the number of school-houses, the title to which is vested in the district. So far as reported, however, there is still one-third of the districts which do not own their houses. The same reasons exist for this as given in that report:

"(1) New districts are frequently created by the county commissioners, and such districts as a rule do not erect houses until some time has elapsed after their organization.

"(2) Many of the houses have been erected on non-patented lands and are not reported by the trustees as belonging to the district.

"(3) The title to the land not being on record, and the houses used for holding the schools having in many instances been erected by neighborhood subscriptions and being used for both school and religious purposes, they are not reported as district school-houses. I have, as far as possible, urged the districts to secure the title of the houses, but, for the reasons above given, have not, except in a few instances, succeeded to my own satisfaction. Aside from the fact that certain communities are opposed to the public schools unless the control thereof can be held by the church whose members are the most numerous in the district, I find that in districts settled by people who have entered Government land there is a feeling of both willingness and helplessness in the matter of erecting new school-houses. Until the lands are patented the school tax is not levied on anything save the personal property and improvements of the entryman. We have no general fund provided for the building of such houses. Our law provides that a special tax in each district may be levied for such purpose when a majority of the resident freeholders and heads of families shall vote in favor of such tax; and it has been my observation in many instances that while the majority of the people have been willing, yet the interests of the more wealthy have led to the defeat of the proposed tax. I believe that so long as the doctrine that the public schools are a part of the 'police power' of the land is maintained, the property qualification of the voter should be abrogated; if this is not done, the many will be helpless against the few. The long interval between the time when the settler proves up and gets his final receipt and the time when his patent is forwarded from the General Land Office allows the entryman to enjoy all the privileges of a freeholder without helping to bear the burden of the public school system. The special tax, if voted, must be levied upon such property as is upon the assessment roll; therefore the tax is often unjust and unequal, enabling the wealthy land-holder to escape from paying his due proportion so long as the land he owns in the district remains unpatented, and compelling others, who have perfected their title and have the same on record, to pay the amount of their assessment. For this reason adequate funds often can not be raised to provide suitable buildings. No special tax can be levied exceeding one per cent. on the dollar of taxable property in the district as shown by the assessment roll. The law of Congress forbidding the incurring of indebtedness exceeding four per cent. of the assessed valuation tends, in my opinion, to prevent many districts from issuing bonds for building school-houses, inasmuch as the limitation is too strict. Increase in wealth will hereafter remove this bar, but we need the houses now."

COMPULSORY EDUCATION.

"The parents and guardians of all children between the ages of eight and fourteen years are required to send such children to school for at least twelve weeks in each school year, eight weeks of which must be consecutive. This act applies only to those residing within two miles of the school-house. A failure to comply with the law subjects the guardian or parent to a fine of from five to fifty dollars. Under the exceptions in this law many parents are avoiding its operation by setting up the excuse that their children are taught in private schools or at home, which is a valid excuse but affords an opportunity to those whose religious belief opposes the employment of Gentile teachers to

keep their children away from the public school of the district. I have not heard of a single fine being collected, and believe that such a law is of no benefit until thoroughly amended."

ILLINOIS, INDIANA, AND IOWA.

The School Reports of these States were not received in season for use in this connection. If possible, digests of them will be given at the close of the volume. See Index.

KANSAS.

[From Report for 1886-87 and 1887-88 of State Superintendent J. H. Lawhead.]

FREE TEXT-BOOKS.

Superintendent Lawhead suggests that the schools be placed still further within the reach of the poor by the adoption of free text-books, the districts buying and owning them, and allowing the pupils the use of them under certain regulations. The plan has been tried in a large number of places, and in some places for quite a number of years, until it can no longer be considered an experiment; and it has given satisfaction wherever tried, few, if any, returns being made to the old system. The testimony of several educators is given as to its success and the benefits to be derived from it. Some of the advantages mentioned are: (1) That the pupils are supplied promptly with books, no delay of a week or two occurring at the opening of the session as under the old plan; (2) it secures complete uniformity; (3) it is much less expensive, as is shown by the reports from those places where it has been tried, a net saving of from \$1 to \$1.50 per pupil being reported; (4) it largely increases the attendance upon the schools, especially among the poor where the purchase of a large number of books for several children at the beginning of the term frequently deters parents from sending some of their children.

GRADING OF THE COMMON SCHOOLS.

The superintendent suggests the following as an outline for the grading of the schools: "That each common district school in the State of Kansas shall be divided into three departments; viz, Primary, Intermediate, and Grammar; and the following branches shall be taught in said common schools:

"*In the Primary Department.*—Spelling: All words on charts or equivalents, first and second readers, by letter and sound. Reading: Through second reader. Writing: Blackboard and slate exercises, forms of letters, and general drill. Arithmetic: Notation to one thousand, addition, subtraction, multiplication, and division tables to the sixes. Language: Write simple sentences, observing capital letters and punctuation; constant drill on correct forms of expression in all recitations. Geography: Oral lessons on points of the compass, county, State, shape of the earth, and geographical terms.

"*In the Intermediate Department.*—Spelling: Oral and written; new words in third and fourth readers; complete first half of speller. Reading: Third and fourth readers completed; all new words defined; use of diacritical marks. Writing: Continue drill on form of letters, and write short sentences with pen. Geography: Elementary completed; map drawing. Arithmetic: Complete fundamental rules; compound numbers; longitude and time; factoring; the G. C. D., L. C. M., and common fractions. Language: Teach subject, predicate, modifiers; analysis of simple sentences; letter writing. History: Introductory lessons in history.

"*In the Grammar Department.*—Spelling: Oral and written; all new words in readers and other books used; proper use of diacritical marks; speller completed. Reading: Fifth reader, sixth reader, or historical, biographical or literary reader. Writing: System completed. Arithmetic: Text-book used completed. Geography: Common school edition completed. History: Common school edition United States, completed. Physiology: School edition completed. Book-keeping: Common school edition completed. Philosophy: Elements completed. Civil government: Primary completed. General lessons, including the effects of narcotics and alcoholic stimulants upon the human system, shall be given in each department."

The pupils shall be examined at the opening of the session by the teacher, school board, and assistant district examiner upon questions prepared by the county superintendent to determine to what grade each pupil shall be assigned, and the same persons shall be the examiners for promotions, and graduation from the grammar department. When any pupil shall have completed the course in any of the departments and passed the examination, he shall be given a certificate to that effect, and shall be entitled to enter the next higher grade in any like school in the county.

SCHOOL TAXATION.

It is stated that to secure anything like equal school advantages, some districts that are financially weak are required to tax themselves almost to the point of bankruptcy. To obviate this injustice a county school tax not exceeding five mills should be levied in each county in the State, cities of the first and second classes being exempted, the proceeds of which should be distributed to the districts in the proportion in which teachers are necessary to supply the schools. If this were done, the levy for school purposes by the county and district should be limited to twenty mills. It is thought that the one-mill levy by the State should be restored, and the amount distributed in the same manner as the present State school fund is apportioned.

KENTUCKY.

For information contained in this Report relating to education in Kentucky, consult the Index. The State School Report was not received in season to make an abstract for use in this place; if possible, one will be given at the close of the Report.

LOUISIANA.

[From Report for 1886-87 of State Superintendent Warren Easton.]

STATE LICENSES TO TEACH.

It is suggested by State Superintendent Easton that provision should be made in the school law for a State board of examiners whose duty it should be to examine candidates for teachers' positions. The certificates should be good for four years and confer the right to teach in any parish in the State without further examination.

URGENT NEED OF EDUCATION.

The reports of the parish superintendents show that there is urgent need of education in the State, that "more than one-half of the voters who go to the polls are unable to tell from their tickets for whom they are voting." One of the main causes of this is the small amount of public school funds, which is only sufficient to keep the schools in operation for four or five months in the year, and even then the pay of the teachers is inadequate. This has caused thousands of young men who could afford it to go to institutions in other States to secure an education. A great many of the people, however, are not even able to send their children to pay schools near them, and hence must depend entirely on the public schools. Strong efforts have been made to induce immigration to the State, but so long as the educational advantages are so deficient immigrants will likely go elsewhere.

THE POLL-TAX AS A VOTING QUALIFICATION.

It is recommended by Parish Superintendent Lipscomb that the payment of the poll-tax be made a prerequisite to the right to vote, and that the tax be increased to \$1.50. By this means sufficient funds would be raised to keep the schools in operation much longer.

EXAMINATIONS MORE RIGID.

In the parish of Avoyelles all teachers are required to stand an annual examination. The percentage required in order to pass has been raised from year to year until now the teachers are required to make eighty per cent. in a maximum of one hundred. As a result, the teachers must keep up their studies, and a higher grade of teachers is secured, many incompetent ones being deterred from applying.

FREE TEXT-BOOKS NEEDED.

In some of the parishes great difficulty is found in getting the pupils supplied with text-books, as many of the parents are unwilling or too poor to purchase them. Especially is this the case with the colored people; and, in many instances, the teacher had to furnish the books himself in order to retain his position.

SCHOOL BUILDINGS NEEDED.

In Terrebonne Parish, and very probably in many others, only a few of the school-houses used belonged to the school authorities; most of them are church buildings, or else erected by private parties. A great many of them are rough frame buildings, without sashes, fire-places, flues, or cisterns. The seats often have no backs, and boards nailed up by the walls are the only desks. Even if the school officers had the means to buy the proper furniture, they would not feel justified in furnishing rough, unsuitable buildings which belonged to private parties.

COLORED PEOPLE WANT COLORED TEACHERS.

Parish Superintendent Lipscomb says there is an increasing disposition on the part of the colored people to have colored teachers. The school boards furnish them colored teachers whenever they can secure competent candidates for the places, but in some cases they are unable to find competent colored teachers and then have to furnish white teachers.

NEW LEGISLATION.

The Legislature, at its session in 1888, adopted act No. 81, revising and consolidating the school laws of the State and repealing all laws conflicting with it.

The State board of education.—By this law the board of education shall be composed of the Governor, State superintendent of public education, attorney-general, and six citizens to be appointed by the Governor, one from each congressional district of the State. The six citizens so appointed shall receive sufficient compensation to cover their actual travelling expenses and per diem for the number of days that the board shall be in session, "the same as members of the State Legislature, payable on their warrants, approved by the president and secretary of the board, out of the school fund." "The board shall meet on or before the first Monday of December of each year, and at other times upon the call of the State superintendent." The State board may require reports to be made by the parish superintendents whenever the interests of the common schools demand it.

Parish boards.—Each director of the parish board shall receive payment for his attendance at school board meetings, when the board shall hold regular sessions on the first Saturday in January, April, July, and October; "provided, that the amount be not fixed by the said board at more than two dollars per diem, and provided that the whole amount expended annually shall not exceed one hundred dollars."

Parish boards may remove parish superintendents.—"For sufficient cause, the parish board of school directors may remove the parish superintendent, subject to an appeal to the State board of education, provided this appeal be taken within ten days after his dismissal. The appeal shall not have the effect of suspending the board's action of dismissal during its pendency, but the parish superintendent shall be reinstated if the State board of education decides that he was dismissed without cause, and reverses the decision of the parish school board."

Parish boards may establish graded and high schools.—"The parish school board shall have the authority to establish graded schools, and to adopt such a system in that connection as may be necessary to assure their success; central or high schools may be established when necessary. The ordinances establishing such schools adopted by the parish school boards shall be submitted to the State board of education, and no high school shall be opened without its sanction, and no such school shall be established unless the amount be donated for the site and suitable buildings are provided for without any expense out of the school fund; provided, that the board of directors of the parish of Orleans shall not require the sanction of the State board for the purposes aforesaid." The State board had previously authorized the establishment of academic schools for the instruction of youth over fifteen years of age.

Provision for fuel and other expenses.—"The school boards shall have the authority to assess and collect one dollar per annum on each family, surviving parent, or guardian, who actually sends a child or children to the common schools of the district, to be collected in such manner as said board shall determine, which amount shall be used in providing the school-house with fuel and defraying the expenses necessary for the comfort of the school."

School district in two adjoining parishes.—"The parish superintendent of two adjoining parishes, where the division line intersects a neighborhood whose convenience requires it, may lay off a district composed of parts of both the parishes; such district shall be reported, together with the census of school children only as belonging to the parish in which the school-house may be situated, by the parish superintendent of the parish; and report shall be made by the assessor and parish superintendent as though it lay entirely in the parish."

Laws of health to be taught, and the French language may be used.—It is required that the "laws of health" shall be taught in every district, and it is provided that the "elementary branches may be also taught in the French language in those parishes in the State or localities in said parishes where the French language predominates, if no additional expense is incurred."

The State superintendent may have a clerk and porter.—The State superintendent may appoint a clerk and a porter; "provided, that the entire expenses of his office, including salaries, postage, and incidentals, shall not exceed the specific appropriation therefor, payable in monthly instalments, out of the current school fund."

Parish superintendent allowed \$125 for expenses.—The parish superintendent, whenever his services are quite efficient and satisfactory, may be allowed a sufficient sum, not exceeding \$125, to defray his necessary expenses in visiting the schools.

Institutes for the improvement of teachers.—The parish superintendents may devote the first Saturday of each month the schools are in session to holding institutes for the improvement of teachers; and any teacher failing to attend or to take such part in the exercises as the superintendent may direct shall forfeit one day's salary unless a satisfactory excuse is given to the parish superintendent in ten days. No teacher living at a greater distance than ten miles or who would have to travel "otherwise than by land" shall be required to attend. Three hours shall constitute a legal session of the institute, and the parish superintendent shall forfeit \$5 for each institute he fails to conduct, unless physically unable to attend, or for other excuse satisfactory to the school board. The institutes may receive as honorary or active members any citizens of good moral character who may desire to attend. The parish superintendent shall cause a roll of the members to be called twice during each day's session of the institute, and a record of the attendance of the teachers shall be kept. All funds of the institute shall be collected by the superintendent and expended only in the interest of the institute. The superintendent shall be paid \$3 a day out of said fund for each day he shall cause the said institute to hold, under his personal superintendence, and for each day's attendance as provided for in section 34. These regulations do not apply to the parish of Orleans, but the school board of said parish may establish such institutes.

Other institutes may be held.—Other institutes may be held between the first day of April and the first day of October, when ordered by the State board or under special laws. Any teacher failing to attend and not rendering a satisfactory excuse to the parish superintendent shall forfeit two days' pay. The sessions shall not be held for more than four days, during which the schools shall have vacation, but no reduction of a teacher's salary shall be made, provided he was present during the entire session. At each session all the common school studies, the school laws, and the work of the teacher shall be considered. The parish superintendent in his annual report to the State superintendent shall give full information as to the institute.

Teachers' examinations.—Before being examined, each teacher shall pay one dollar to the parish institute fund, but it shall be returned to him if he does not receive a certificate. Whenever two or more teachers apply for the same position or positions, a competitive examination shall be held, and the position given to the most competent.

Revenue for schools.—A levy of not less than one mill and a half may be made by the police jurors of the several parishes, or legal representatives of towns, for school purposes. This shall be provided for in their annual budgets. All fines imposed by the district courts and the amount collected on forfeited bonds in criminal cases, after deducting commissions, shall be applied to the school fund.

The schools of New Orleans.—All the public schools of New Orleans shall be under the control of a board of directors of twenty members, eight appointed by the Governor and twelve elected by the city council. The mayor, treasurer, and comptroller of New Orleans are entitled to take part in all deliberations for maintaining the schools, but shall not have the right to vote. The board may elect a secretary, who must not be a member of the board, and who shall receive a salary of not more than eighteen hundred dollars. His duties, in addition to those prescribed by the board, shall be to make a quarterly report to the State superintendent of the cost of maintaining the city schools, and to keep the accounts of the board in strict accordance with such budget as they may adopt. The board of directors also appoint a superintendent of schools at a salary of two thousand dollars. The certificates of teachers shall be good for three years, after which another examination may be taken, and if the applicant is found competent to teach a higher grade school than the one for which the first certificate was issued, he shall receive a certificate good for five years.

MAINE.

For information contained in this Report relating to education in Maine consult the Index. The State Report was not received in season to make an abstract for use in this connection; if possible, one will be given at the close of the Report.

MARYLAND.

ARBOR DAY.

According to the proclamation of Governor Jackson, Wednesday, the 10th day of April, 1889, was "Arbor Day" in Maryland—the first one of the kind ever observed in the State. It was a bright, warm spring day; and the boys and girls were glad to go out and breathe the pure, fresh air, and to hear recitations about trees and flowers; and the parents and friends of the pupils, too, were easily induced to go with them and to help dig holes and plant trees. Everybody was attracted by the novelty of the scene.

In Baltimore the pupils of all the public schools assembled in their different buildings where they spent an hour or two, before going out, in exercises appropriate to the

occasion, such as the recitation of select pieces from different authors, and the reading of short original essays about trees of historic interest in the United States, interspersed with songs by the whole school. After this they went to the different parks, where they planted silver maples, tulip poplars, sycamores, and other varieties, naming them after Governor Jackson, Mayor Latrobe, Enoch Pratt, and others.

Reports were received from all the counties of the State, showing that everywhere the day was observed by the pupils and many of their friends, and that hundreds of trees were planted; in Frederick County alone it is estimated that five hundred trees were planted.

MASSACHUSETTS.

For information contained in this Report relating to education in Massachusetts consult the Index. An abstract of the State School Report will be given at the close of this volume.

MICHIGAN.

[From Report for 1886-87 of State Superintendent Joseph Estabrook.]

GENERAL CONDITION.

The statistics show that general progress has been made; a larger school enrolment, greater school expenditures, more volumes in the school libraries, the same length of term in the graded schools, but a slightly shorter term in the ungraded schools. It will be noticed that the increase of the private school enrolment is nearly as large as that of the public school enrolment, and consequently the rate per cent. of increase is by far greater.

TOWNSHIP DISTRICTS.

An effort was made in the Legislature to authorize the qualified voters to abolish the school districts and to place all the schools of a township under a township board of managers; and, although the effort failed, the subject is still being considered with great interest at teachers' institutes, county associations, farmers' clubs, and meetings of grangers; and it is thought that in all probability the change will be made. The plan of township districts is very highly recommended by the following State superintendents of public instruction: John W. Dickinson, of Massachusetts; B. S. Morgan, of West Virginia; C. D. Hine, of Connecticut; F. M. Smith, of Tennessee; Solomon Palmer, of Alabama; T. B. Stockwell, of Rhode Island; J. B. Thayer, of Wisconsin; Justus Dartt, of Vermont; J. Q. Stewart, of Pennsylvania (deputy superintendent); N. A. Luce, of Maine; J. W. Patterson, of New Hampshire; J. W. Akers, of Iowa; and J. W. Holcombe, of Indiana.

A resolution was presented and unanimously adopted at the State Teachers' Association that the highest interests of the schools demand that the township be made the unit of the educational system instead of the district.

COUNTY SUPERVISION.

As it was very desirable to entrust school supervision to those who decide as to the attainments of the teachers, an effort was successfully made to secure such legislation as would place the duty of visiting and supervising the schools upon the secretaries of the boards of county examiners. It is thought that if due care is taken to select secretaries who are competent and who will give careful attention to the schools, the change will prove a very beneficial one.

MINIMUM LENGTH OF SCHOOL.

The minimum length of school which will entitle a district to a share of the primary-school interest fund and one-mill tax is three months. Some districts barely maintain their school for this length of time in order to secure their proportion of the public money, while they are abundantly able to support a school for six months. The law requires that all children between the ages of eight and fourteen years shall attend school for at least four months in each year, which, of course, can not be done where the schools are only maintained three months. It is recommended that the schools be required to continue six months in order to share in the public funds.

TEMPERANCE INSTRUCTION.

The law requiring instruction in the public schools as to the effects of alcoholic stimulants and narcotics has been better complied with than ever before. A text-book on this subject is required to be placed in the hands of every child who can read well and understandingly, and it is to be studied in the same manner as history, geography, and the like. In the graded schools two books on the subject must be taught.

TEACHERS' CERTIFICATES.

Four different authorities are empowered to grant certificates: The State board of education, the faculty of the State Normal School, boards of education of schools under special charters, and county boards of examiners. More than nine-tenths of all the certificates are granted by the county boards. First-grade certificates are granted only to those who have taught successfully for at least a year, and are valid throughout the State for three years; second-grade certificates are granted to those who have taught six months, and are valid for two years; third-grade certificates are granted for one year.

MINNESOTA.

[From Report for 1886-87 and 1887-88 of State Superintendent D. L. Kiehle.]

GENERAL STATEMENTS.

The average attendance during the year 1887-88 was slightly larger than in the previous year, the duration of schools was longer, and the expenditure for school purposes much greater, especially for new school-buildings and sites. The value of all the school-houses and sites is now estimated at \$8,162,021, an increase of 18 per cent. in two years.

The number of teachers' meetings and local associations held during the year was two hundred and forty-two.

TEACHERS.

There was a notable tendency towards the displacement of male teachers by females as well as towards an equality of salaries, there being a loss of ninety-seven in the number of male teachers, but an increase of three hundred and sixty-four female teachers; the salary of male teachers was 90 cents less per month, that of females was 32 cents greater. A large number of the teachers are not qualified to discharge successfully the duties of their position, but have been employed through the influence of friends or from feelings of charity. As the school term is becoming longer, and the salary of teachers is being increased, it should be insisted that effective work be done.

HIGH SCHOOLS.

The number of State high schools in operation during the year was sixty-two, with an attendance of thirty-three hundred pupils. The chief obstacle to their success is that so many of their pupils come to them from the common schools with a primary education sadly deficient and unsatisfactory. The high schools have served a useful purpose in bringing to light the defective work of the primary schools. The high school diplomas and certificates of graduation are accepted by the normal schools and colleges of the State, as well as by the State university.

TEMPERANCE INSTRUCTION.

According to the requirement of the Legislature, a commission was appointed to examine the different text-books on temperance and hygiene, and suitable ones were selected to be used in the common schools. A circular containing full instructions was issued to the different teachers and school officers, and efforts made in every possible way to secure their interest in the subject, and, as a result, it has been as well taught as any other branch in the public schools, so far as can be ascertained from the county reports, and the children have taken much interest in it.

PUBLIC SCHOOL LIBRARIES.

According to the provisions of the law a careful selection of suitable books for the different grades of the public schools was made, and, after advertising, the contract for supplying the schools was awarded to the lowest bidder. So far the experiment has proved a decided success. In counties where a large portion of the inhabitants were of foreign birth and with foreign ideas, the pupils have acquired much knowledge of American history and principles, and are rapidly coming into sympathy with American feelings.

FOREIGN LANGUAGES IN THE SCHOOLS.

Particular attention is called to the fact that in some of the schools of the State which are supported by Americans, the language used is un-American, and carries with it traditions and associations connected with different foreign countries, and so the schools fail to harmonize the feelings and ideas of children of foreign-born parents with those of their adopted country. They do not acquire that knowledge of our patriots and statesmen, of the formation of our Government and its subsequent history, which inspires a worthy pride in American citizenship, and a love for American institutions.

COMPULSORY ATTENDANCE.

As the laws relating to attendance of children at school seem to be ineffective, it is suggested that they be so amended as to accomplish the end designed. A large number of parents are so indifferent to the education of their children as to permit them to grow up in ignorance and consequent unfitness not only to secure their own well-being but to become capable American citizens.

SUGGESTIONS.

Superintendent Kiehle thinks that some changes can be made which would prove of great help to the schools.

The present school district system should be abolished and township districts adopted.

The election of a county superintendent, an officer that has much to do with the success or failure of the schools, takes place at the same time as the general elections, and consequently his selection is often to be attributed to political rather than educational influences. In this way, a faithful and earnest county superintendent is often displaced by some one who has made it his endeavor not to qualify himself for the position, but to win the good-will of the majority of the voters. As the position is an educational one and should be entirely disconnected from politics, the officer should be chosen at a special election and should be required to give some evidence of his qualification.

The reports of city superintendents, in cities of ten thousand people or more, should be made directly to the State superintendent, and such cities should not take part in the election of county superintendents.

It is recommended that legislation be made—

- (1) For the licensing of graduates of normal schools to teach.
- (2) For examining and licensing persons to teach in the State who have proper education, skill, and experience.
- (3) For an appeal to higher authority by the district, teacher, or superintendent in the matter of a teacher's qualifications. This is required in the interest of all parties concerned.

MISSISSIPPI.

For information contained in this Report relating to education in Mississippi consult the Index. The State School Report was not received in season to make an abstract for use in this connection; if possible, it will be given at the close of the Report.

MISSOURI.

[From Report for 1887-88 of State Superintendent W. E. Coleman.]

GENERAL STATEMENTS.

Each succeeding year marks a step forward in the condition and effectiveness of the public schools of the State, but that some of them do not share in this advance must also be admitted. Perhaps as much has been accomplished as could be anticipated under the circumstances; but the tax-payers have the right to expect the best possible return for the money expended, and especially that nothing shall be done, or left undone, by the law-makers of the State which shall prevent the schools from reaching the highest point of success.

"The entire school law needs to be carefully and thoroughly revised, its incongruities eliminated, its phraseology couched in language susceptible of comprehension by those to whom its execution is intrusted, and each part considered in relation to the whole, that its unity may be perceived and its successful operation rendered certain."

The law of 1874 has been so amended and repealed that it is impossible for school officers, teachers, and tax-payers to determine what the law really is, so that it should be entirely revised, and all irrelevant and unnecessary matter omitted.

COUNTY SUPERVISION.

The State employs more than fourteen thousand men and women to instruct its pupils, but provides no supervision of the work of this large body of teachers, except the nominal supervision of the county commissioners. It assumes in the first place that the teachers thoroughly understand what and how to teach, and how to manage a school; in the second place, that all the teachers are perfectly honest and honorable and will discharge their duties with the utmost fidelity.

There should be a competent superintendent in each county of the State to examine teachers, help them to organize and classify their schools, suggest various improvements, to ascertain the condition of the school funds of the county and to see that they are properly protected, to conduct teachers' institutes, and to endeavor in every possible way

to improve the condition of the schools. In all private enterprises of great magnitude the employment of supervisors is regarded as essential as the employment of men to do the work itself.

"The city schools and many of the town and village schools are effectively conducted, and clearly demonstrate what can be accomplished when unity of purpose and concert of action are the dominant features in their management; they are systematically graded and classified; specific duties are assigned to each teacher, and the entire work is under the direct supervision of a competent leader, and all work together for the consummation of a fixed and definite purpose.

"What a contrast is presented when the condition of the country schools is considered; each teacher is independent of every other teacher in the county; unity of purpose and concentration of effort are wholly disregarded; the classification is loose and system is unknown; one-half of these schools are taught by inexperienced boys and girls, who should be attending some good school in order to familiarize themselves with that knowledge which they should be enabled to impart to those whom they are pretending to teach; and, in fact, many of these schools are no better than those we had in this State thirty and forty years ago."

SCHOOL FUNDS.

The law should require that the interest on all county and township funds be collected by July 1, or foreclosure immediately declared. School officers too often fail to force a prompt payment on account of the poverty of the debtors, while if the debt were due a bank it would be paid immediately.

An examination of the reports of the county clerks for 1887 and 1888, although they were the same men, show discrepancies in the amounts of county school funds of from one hundred and fifty dollars to five thousand dollars. Equally glaring discrepancies are found in the reports of the township funds; and what is reported as county funds one year will be reported the next year as township funds. County superintendents are needed badly to look after these funds and to see that the interest is promptly paid.

SCHOOL TERMS.

The present school term is entirely too short; and the school boards of every district should be required to maintain a school for six months each year, provided a levy of forty cents for school purposes is sufficient therefor. Any district failing to maintain a school for this length of time should forfeit its right to any part of the public moneys apportioned by the county clerk in August of each year.

SECTARIAN INSTRUCTION.

Although the Constitution of the State expressly declares that no appropriation of public funds shall be made in behalf of any public or private institution in which sectarian doctrines or creeds are taught, this provision is being daily violated in many of the schools. It would be well if this were forbidden in the school laws also.

LANGUAGE OF THE SCHOOLS.

In a large number of the districts of the State the German element of population greatly preponderates, and, as a consequence, the schools are mainly taught in the German language, and sometimes entirely so. Hence if an American family lives in such a district the children must either be deprived of school privileges or else be taught in the German language. In some districts the schools are taught in German a certain number of months and then in English, while in others German is used part of the day and English the rest.

Some of the teachers employed are scarcely able to read or speak the English language; while the first question asked him is whether he reads and speaks German. Many letters were received by the State superintendent from school officers and patrons asking if the schools should not be taught in the English language, and complaining that although living in this country their children are being taught in a foreign language. In Gasconade County German is taught in about twenty-seven, or one-half of the districts. In Saint Louis County there are eighty-four districts; forty of them teach German. Many of the more enlightened Germans prefer that the schools be taught in English, as they are anxious for their children to be Americanized in principles, feelings, and language.

TEACHERS' INSTITUTES.

Although there is no law requiring teachers' institutes to be held, in many of the counties the teachers voluntarily held meetings lasting for two, three, or four weeks in order that they might be better qualified for their regular work. In those counties where the county commissioners took an active part in arranging for the organization of the work the institutes were entirely successful. Much depends upon the kind of conductor the institute has; he may be one whose knowledge is thoroughly classified and

who "presents each topic in its true relation to others to be considered and that have been discussed; earnestness is manifest in thought, word, and action; he loves his work and is master of the situation."

"The second is the talking-machine that is sometimes set to running in the institute; he talks, talks, talks; he assumes to know everything, but is entirely devoid of system or the power to classify." "The third includes the good, the bad, and the indifferent; they are too lazy or too indifferent to make proper preparation; they simply work for the money promised."

REPORTS.

The law requires two reports from each county to be made to the superintendent of education, one from the county clerk and one from the county commissioner. The reports from the county clerks are far more reliable than those from the county commissioners, especially in those counties not under township organization. The reports made to the county commissioners by the district clerks are so late in being forwarded and so incorrectly made out that they are almost worthless.

ARBOR DAY.

The first Arbor Day observed in the State was in April, 1886, but as it was something new and most of the schools had closed, only a few districts paid any attention to it; but in 1887 much interest was taken in its observance by teachers, pupils, and the public generally; and "many a school-yard bears evidence of the labor and care bestowed upon it on that bright spring day."

The Arbor Day of April 6, 1888, was observed by ten times as many districts as both the previous ones together, and the custom has now become fully established, and the day is looked forward to with much interest.

Friday, April 5, was appointed as Arbor Day for 1889; that day of the week being selected because not much is accomplished in a school on the day succeeding a holiday.

"Many of the programmes arranged and carried out on this day have proven beneficial to the community, and the literary merit displayed reflected great credit upon those in charge; and the very fact that a greater interest will be felt hereafter in tree-planting and tree-culture will insure an increased desire on the part of teachers and pupils to furnish the public with a literary treat each recurring Arbor Day."

THANKSGIVING DONATION.

On November 1, 1888, a circular was sent out by the State superintendent calling upon the pupils to do something for the benefit of the poor children on November 29, the day appointed by the President and Governor as Thanksgiving Day, in order that no child should have to remain away from school because of not having the necessary books or suitable clothing.

It was suggested that a "donation party" be held at such hour as the committee of arrangements should determine upon, when some literary exercises might be held and afterwards the parcels and packages delivered. It was felt that the children receiving books and clothing would be disposed to use their opportunities well and to be models of deportment.

This invitation was complied with to a very large extent, and from the letters of different superintendents it was learned that a great many donations of school books, clothing, provisions, etc., were made, and many poor boys and girls enabled to attend school and secure a degree of education which will be of great assistance to them through life.

So highly satisfactory were the results of these efforts that the State superintendent has determined to make this an annual occasion for the distribution of gifts to the poor, and especially gifts of school books and clothing to poor children.

MONTANA.

[From Report for 1886-87 of Territorial Superintendent Arthur C. Logan.]

The public schools of Montana during the year 1886-87 were characterized by an unusual degree of progress and prosperity. The number of pupils enrolled was larger than in the previous year, the amount of school funds was much larger, the teachers were of a high order and were well paid, and the schools were in session one hundred and fifteen days or nearly six months.

INDIFFERENCE OF THE PUBLIC.

The people take sufficient interest in school matters to see that ample funds are provided for them, and that large, commodious buildings are erected, but there they are inclined to stop and leave the rest of the work to the teacher. This indifference is attributed to the lack of information in reference to the schools, as the school officials are

not required to publish any report. In order to overcome this, Superintendent Logan prepared blank reports which are to be filled by the county superintendent and furnished to the county commissioners for publication each December; the reports to give full information as to the schools, the amount of school funds, how apportioned and expended, names of teachers, etc.

COUNTY SUPERINTENDENCE.

Another difficulty in the way of successful school work is the lack of efficient and constant supervision. This is accounted for by the smallness of the salary allowed by law, which ranges from three hundred to one thousand dollars, which in many cases is not more than one-third or one-half as much as teachers under their supervision receive. The result is either that incompetent men are obtained or else men who will only devote the small portion of time to it which they can spare from their regular work. Competent supervision is very much needed, as is shown by the language of Superintendent Logan: "In no State is constant and thorough supervision more needed than in Montana, with its vast territory, its counties larger than ordinary States, its school districts often from fifty to one hundred miles apart, and with a population made up of representatives from every State and Territory in the Union, and from every civilized nation under heaven.

"To unify this heterogeneous mass and marshal its forces under any established system require masterly generalship and constant attention, and this can not be accomplished by one visit a year (this is all the law requires) or on a salary of five or six hundred per year, and I think this point should be considered by those claiming, and perhaps justly, too, that it is a supervision that does not supervise. The question then is, shall we, as many propose, abolish the office or apply the remedy?"

SCHOOL LANDS.

One-eighteenth of the public domain of the Territory was set apart by the General Government for the benefit of the public schools when Montana shall have arrived at statehood. Many of these lands have been honestly claimed by settlers as mineral lands, but many which were not mineral lands have also been claimed. Superintendent Logan urges that strong efforts be made to prevent further encroachments upon these.

DEAF-MUTES AND THE BLIND.

Under provisions of the laws of Montana for the education of the blind and the deaf, seven wards are being educated in Pennsylvania, Maryland, and the District of Columbia at an annual expense of three hundred dollars for each. In addition to their regular education, they are also being taught some trade by which they will be able to secure a livelihood.

[From the Report of the Governor in 1883.]

"The subject of education is a favorite theme in every household in Montana. The people are united and have one common spirit of the largest liberality and eager willingness in sustaining and advancing their public schools. Every child of school age in the Territory is on the school roll and is at school nine months of the year. In this Territory there is in each of the cities and large towns the very best and highest class of graded schools, and in all the schools of the Territory the very best class of teachers, superintendents, etc. Montana has no public school fund, amounting up to millions, as have the people of the States. The school fund for public schools in this Territory is in the hearts of the people and taxation of their property. The entire fund, supplemented by a small amount derived from fines, is raised from year to year by direct taxation. No one complains of it. And yet there is more money paid out per capita for public schools by Montana's people than is paid by the people (including their assistance from their great school funds) of any of the States."

SCHOOL LANDS.

"The support of future public schools in Montana is liberally provided for by the action of the General Government heretofore, in setting apart and donating one-eighteenth of the public lands within the Territory for the benefit of schools, and in pursuance of that law the sixteenth and thirty-sixth sections have been so set apart and designated as school lands for Montana's people. But this grant is withheld from the possession or use and benefit of the people and children of Montana until such time in the future when it may be deemed proper to pass them into their possession and control. It is a matter of grateful pride with these people, through these years of waiting, as they anxiously look forward to the time when they shall be allowed the force of this great accession to their educational facilities; but it is painful, and a source of regret and humiliation to

this people, to see and know of these lands being seized, fenced, occupied, appropriated, sold, and conveyed, and the timber cut and consumed, in the greed and reckless grasping of combined capital and avarice of individuals, without let or hindrance."

NEBRASKA.

[From Report for 1886-87 and 1887-88 of State Superintendent George B. Lane.]

GENERAL STATEMENTS.

The State superintendent announces with pleasure to himself and as an occasion of congratulation on the part of the people of Nebraska that the public schools of the State are in a prosperous condition; that during the last two years there has been increased educational interest and activity, and that the schools have been placed in a condition of much greater usefulness. In 1886 the expenditures for schools did not amount to three millions of dollars, but in 1888 over four millions of dollars were spent. There was an increase also of twenty per cent. in the number of children attending schools.

In 1886 the number of school-houses was 4,267, but in 1888 the number had increased to 5,187, having an estimated value of \$3,689,823; the number supplied with patent desks being 3,977. The first houses erected in a new neighborhood are usually sod houses, and the school-houses are of the same character, but they are much more comfortable than might be supposed; but as the community becomes older and wealth is accumulated the school-houses are frame or brick buildings.

LENGTH OF TERMS.

The average duration of the schools of all the districts was 137 days; the number of districts having a school six or more months being 3,904; the number having four, but less than six months, being 529; the number having three, but less than four months, being 974. Many of the districts reported as having a school more than six months actually maintain a school for nine or ten months.

The law provides that a school shall be taught by a legally qualified teacher not less than three months in a district which has less than thirty-five pupils, nor less than six months in districts that have between thirty-five and one hundred pupils, nor less than nine months in districts which have more than one hundred pupils. The State superintendent thinks it would be wise to require districts having less than twenty-five pupils to maintain a school for three months, and districts having from twenty-five to thirty-five pupils to maintain a school for four months; for many of the districts that are abundantly able to keep up a school for much longer terms refuse to do so from selfish or false ideas of economy.

TEACHERS.

The number of male teachers employed in 1887-88 was 2,752; of female teachers 7,134—a ratio of about one to three, and a much larger proportion of females than heretofore. "The natural delicacy of woman, her sympathetic tendency and quick sensibilities, cause woman's profession to embrace the care and nursing of the body in the critical period of infancy and sickness, the training of the mind in the most impressive period of childhood, the instruction and control of servants and most of the government and economies of the household. How far the education in public schools should be entrusted to women teachers is a question not yet fully settled. I am of the opinion that in this State the selection of women teachers is due to various causes outside of the consideration of the real questions to be determined in hiring a teacher—the securing of the teacher who can produce the best *permanent results* in the school and district.

"In many districts the number of pupils has fallen off, and the money has often diminished accordingly, so that it is impossible to employ an experienced male teacher. The argument of ten dollars difference in the cost of a male and a female teacher is a powerful one, and it is considered best to have a female teacher to teach the pupils, both few in number and small in size. In many cases this proposition is doubtless true, and best under the existing condition of the district and number of pupils."

But when the districts are made as large as they should be, and the schools become correspondingly larger, it is thought that it would be the part of wise management to secure and retain, especially for the larger schools, good male teachers, who could exert a stronger and better influence over large boys.

SCHOOL FUNDS AND LANDS.

"The public schools of this State are sustained (1) from a local tax; (2) from a general State tax; (3) from the interest of the permanent school fund; (4) from lease of school lands; (5) interest from unpaid principal of school lands sold; (6) from certain fines and licenses. The land grants made by the General Government to the State form the basis

of our educational funds. The total amount of land so granted amounts to 2,884,398 acres; of this amount 162,051 acres have been deeded, leaving 2,722,347 acres still held by the State; of this number of acres, with the title still vested in the State, there are under contract of sale 655,431 acres, and under lease 1,427,460 acres, leaving 655,431 acres not yet leased or contracted for sale.

"The present condition of the educational funds of the State is quite unsatisfactory, from the fact that a large part of the permanent school fund is lying in the treasury and producing no income for the support of education."

There has been an increase of over a million dollars in the school fund during the last two years, but of this amount \$270,633.79 is lying idle in the treasury, bringing no income, as the Constitution of the State limits the investment of school funds to United States, State, and county bonds; but these are no longer available. The school district bonded indebtedness of the State is \$5,947,724.30, most of it bearing interest at the rate of seven per cent. per annum and held by Eastern capitalists. "No better securities can be found in this State than registered school district bonds. Would it not be a part of the duty of the State to the school districts to invest its permanent school funds in these district bonds? The interest paid by these districts would be returned by way of apportionment to the school districts, to the great good of the schools and at no loss to the State."

The income received from the leasing of school lands amounts to \$153,276.62. The law required an appraisal of school lands to be made in 1883, and that another appraisal shall be made every five years thereafter. According to the appraisal of 1888 the value of the lands has greatly increased, and as rents are determined by these values, the income to the schools from this source will now be increased more than two hundred per cent.

GRADING OF SCHOOLS.

The work accomplished by the graded schools is very thorough. Especially is this true of the city schools, which are generously supported by the public, and may be regarded as the striking feature of our educational system. But the excellent work of the graded schools should not encourage us to overlook any defects which can be eradicated.

"In our reaction from the 'no-system' methods and plans of the early days, we have swung well over to the other side of the arc, the 'all-system' plan. In our efforts to repair the waste of the former unorganized activity, we have, I fear, developed so much organization in some directions as fairly to give rise to the query whether we have not lost sight of the original idea upon which the whole theory of our education was founded. For one, I am persuaded that the criticisms frequently made, that our graded schools are arbitrary in their organization and tyrannous in their administration, that the system is placed first and education second, and hence that the system is maintained often at the expense of the material for whose welfare and general advantage it was created, are to a certain extent true."

"It would seem that the inevitable existence, even in the best cities, of broad differences in the pupils of the public schools in their social, moral, and intellectual attainments, in their environments, render a degree of elasticity necessary both in the matter of gradation and classification, and also in that of instruction. We should proceed in these things upon the theory of providing equally for all. This principle is often violated by demanding external conformation in organization and course of study."

The courses of study in the graded schools are arranged with the expectation that the children will continue to attend school for ten or twelve years, and the pupils remain in each grade for one year; no provision being made for advancing during the year pupils who show higher attainments or better talents than the rest of the class; but the whole number are chained together, the brighter pupils being held back and the dull ones dragged along in studies which they cannot master. A great many children are required to leave the schools by the time they become twelve years of age, and consequently they desire to advance as rapidly as possible in those studies which they will specially need in the practical pursuits of life. Superintendent Lane thinks that the needs of such children should be considered more, and provision made by which pupils of greater proficiency can be advanced to higher grades at least oftener than once a year.

COUNTY SUPERINTENDENCY.

The importance and advisability of having competent and energetic men to superintend the schools of the different counties is very generally admitted in Nebraska. Their influence is seen in awakening a public interest in schools, and thereby securing a larger, more punctual, and regular attendance, in selecting better qualified and experienced teachers, in better classification of pupils, in the introduction of new methods, etc.

In the schools of cities and towns an efficient superintendent is always employed; but in these schools the pupils are well graded and classified; they attend more regularly than in the country, the teachers are the best to be obtained, and every thing is

calculated to make the schools a success. In the country schools, however, the opposite conditions too often prevail; hence the greater necessity for a competent and faithful county superintendent.

COMPULSORY EDUCATION.

By a recent act of the Legislature of Nebraska all children in the State between the ages of eight and fourteen years inclusive are required to attend a public or private school for twelve weeks or more each year, unless prevented by illness, poverty, inability, or by reason of being already proficient.

This law will likely be the means of securing the attendance at school of many children who otherwise would remain at home. The desire for an education arises from external circumstances and surroundings, not from within; for, as a rule, the less education the people possess, the less desire do they have for it, the law of supply and demand not holding good in this case.

ARBOR DAY.

"The statutes of Nebraska designate the 22d day of April as Arbor Day. This day was originated in Nebraska in 1872. It has since been established in twenty-eight of our States and two of our Territories. The people of the United States realize the importance of forest culture. In no part of the country is it of more importance than in this State. Statistics show there have been planted in Nebraska since Arbor Day was instituted 355,560,000 forest, shade, and fruit trees.

"On this day, above all others, the pupils of our public schools should be educated to care for the material prosperity of the country and to foster the growth of trees. Let teachers, parents, and school officers urge and encourage the children in every school district, town, and city in the State to plant trees on that day in the school yard. Let the child understand that he has a special interest in the tree he plants; that it is his; that upon him devolves the responsibility of protecting and cultivating it in coming years. In every yard there should be system and regularity in arranging the trees, and in cities and towns they should be planted according to artistic designs. The school yards of the State beautified with trees would educate the æsthetic taste of the children and be a material blessing to the country."

The State superintendent sent out a circular letter to each school district in the State with reference to the observance of this day. He reports that it meets the hearty indorsement of teachers and school officers.

COURSE OF STUDY FOR COUNTRY SCHOOLS.

By request the department of education prepared a teacher's guide and course of study for country schools, showing the amount of work which should be attempted and giving such suggestions as to school methods and management as experience showed to be useful. It received much attention at the different meetings of teachers and has been adopted in more than half the counties of the State.

NEVADA.

[From Report for 1886-87 and 1887-88 of State Superintendent W. C. Dovey.]

GENERAL STATEMENTS.

The State superintendent was enabled by personal observation to familiarize himself with the condition of the public schools of the State. He visited during the year a majority of the schools of all the counties but three, making two hundred and fifty school visits in all, and travelled nearly two thousand miles. He reports that the schools are in a fairly prosperous condition, when it is considered how widely scattered are the families of the rural districts: the schools of the cities and towns are doing excellent work; the teachers are well qualified and acquainted with the latest methods of instruction.

According to the school census of 1888 there has been a decrease of one hundred and twelve in the number of children of school age. It is doubtful, however, whether this is really true.

HIGH SCHOOLS.

The high schools of Virginia, Gold Hill, Carson, Reno, and Eureka are worthy of special mention, and have been doing much to supply the place of a normal school. Many graduates from them have each year entered the teacher's profession, and, although lacking practical experience in teaching, their interest and enthusiasm have done much to secure their success. The instruction in the high schools was designed somewhat to prepare the students for teaching. The Legislature passed a bill, however, which was approved February 7, 1887, providing for the establishment in the State University of

a school for the instruction of teachers. This school has been established and quite a number of students have been enrolled.

SCHOOL FUNDS.

The Constitution of the State forbids the investment of the school funds in any other than the bonds of the United States and of the State of Nevada, both of which sell at such a high premium and bear so low a rate of interest that the State board of education thought best not to invest in either, but to wait till the Constitution could be so amended as to permit the investment of school funds in other bonds. The amount of the school moneys awaiting investment December 31, 1888, was \$359,083.02.

SCHOOL LIBRARIES.

Very few school libraries have been established, and none of them in rural districts. A large number of schools, however, have been supplied with Yaggy's Geographical Study and Yaggy's Anatomical Study. Both of these will prove of great value in the school-room. The Anatomical Study will be of great assistance in the instruction of physiology and hygiene, which is now required.

Three hundred maps of the State of Nevada were purchased with the appropriation made by the Legislature for the purpose and were distributed among the schools.

COUNTY SUPERVISION.

"The act consolidating the office of county school superintendent with that of district attorney is, to say the least, a measure of doubtful expediency, and is generally so regarded by the friends of education. It may be that the district attorneys are well qualified, yet the fact remains that the duties of the two offices are foreign to each other, and it may often happen that the duties as attorney would require his entire time when most needed in the supervision of school affairs. The reason advanced in favor of the measure was that it was a measure of economy. The average monthly salary of the county superintendents of schools is twenty-eight dollars. It is not reasonable to suppose that there is a county that can not afford to pay this paltry stipend when it is remembered that there are nearly ten thousand children of school age in the fourteen counties of the State, that there are 238 teachers employed, and that there was expended in 1888 the sum of \$168,852.39 by the State and the several counties for the maintenance of our public schools. This expenditure, far too small, must annually increase. It is clearly manifest that intelligent and well-paid county or district supervision is the urgent need of the State to-day, and until that is provided our school system cannot take that high rank to which it is entitled."

ARBOR DAY.

The language of the act leaves no doubt that it was the intention of the Legislature "to establish Arbor Day as a holiday for the public schools for no other purpose than to afford the teachers, children, parents, and friends time and opportunity to engage, during a portion of the day at least, in planting trees, shrubs, and vines. A respectable number of the schools of the State so employed a good portion of the day, sufficient at least to comply with the letter of the law. There were, however, several schools, some of the largest in the State, that entirely ignored the essential provisions of the act and simply gave a vacation."

"At the State University the day was observed with appropriate exercises and ceremonies by the faculty and students. The board of regents, the faculty, students, and citizens of Reno marched in procession to the grounds already prepared for tree-planting and took part in the planting and naming of many hard-wood trees in honor of prominent citizens, members of the board of regents and faculty, and friends of education generally. When the trees were planted the audience listened to an address by the State superintendent of public instruction and dispersed much pleased with the exercises.

"Arbor Day is becoming very popular throughout the Western States, and has already been instrumental in planting hundreds of groves in what was formerly known as the treeless regions of the West."

SCHOOL TEXT-BOOKS.

As the State of California has adopted the plan of preparing and publishing its own text-books, the question is likely to arise in Nevada also. Superintendent Dovey thinks that, even if the measure should prove successful in California, it would be exceedingly doubtful as to its success in Nevada, where there are only 9,716 school children, while California has 280,000.

LEGISLATION RECOMMENDED.

(1) A law should be passed forbidding the employment of any teacher under eighteen years of age.

(2) The law relating to the apportionment of county school funds should be amended so as to reduce the number of pupils assigned to one teacher from one hundred to not more than seventy-five.

(3) Teachers should receive compensation for the time spent in attendance upon institutes and educational meetings.

(4) Members of the county boards of examiners should be paid for their services.

(5) School boards should be required to expend from fifteen to fifty dollars of the school money apportioned to each district in the purchase of books of reference, maps, charts, and apparatus necessary for the proper furnishing and equipment of the schools.

(6) "The office of county superintendent of schools should be re-created, and salaries commensurate with the duties of the office in the several counties should be allowed. If this cannot be done, the State should be formed into at least three educational districts, and a salary of at least two thousand dollars a year allowed to each of the three district superintendents."

(7) One thousand dollars should be appropriated for the travelling expenses of the State superintendent of public instruction to enable him to visit all the school districts in the State.

(8) "The State superintendent of public instruction should be authorized to make contracts at Berkeley, Cal., for the education of all deaf and dumb and blind children in the State of school age."

(9) "An appropriation of at least five hundred dollars should be made for the purpose of holding State Teachers' Institutes during the years 1889 and 1890."

(10) "The May election law should be made general throughout the State so that it would apply to all districts, and the maximum levy of taxes should be raised to seventy-five cents on one hundred dollars' valuation, instead of fifty, and the minimum should be placed at forty cents. This change is greatly needed in many counties in the State and would prove a benefit to all."

NEW HAMPSHIRE.

[From Report for 1887-88 of State Superintendent J. W. Patterson,]

GENERAL STATEMENTS.

The report shows progress to have been made along the whole line—in the number and duration of schools, enrolment and average attendance, and in the expenditures for school purposes. The reports of city superintendents and town committees state that the teachers have done faithful and successful work in the schools, but that their efforts have been crippled very much by the irregular attendance and tardiness of pupils. Twenty-eight new school-houses were built, and there was an increase of twenty-two in the number of graded schools, which resulted from the union of a number of small schools. In the last ten years there has been a decrease in the public school enrolment of 6,209, while during the same time there has been an increase in the private school enrolment of 6,159, showing the extent to which private schools have drawn from public schools. But the total enrolment of private schools is yet only 7,652, or about one-tenth of the school population of the State.

THE TOWN SYSTEM.

"It will be observed that the number of school districts reported is only two hundred and seventy. This is five less than last year, some districts having given up their special organization and gone into the town system. The average length of the schools in weeks, for the whole State, is 22.9. For 1885, under the old system, it was only 19.95. Thus, it will be seen that the new law gives, on the average, within a small fraction, three weeks additional to every school of the State, or in other words to every scholar of the State, as all enrolled are educated in these schools. This makes an aggregate of 6,826.3 additional weeks of pupilage to the scholars of the State, and no man can measure the financial value or the intellectual and moral power involved in this."

In some of the towns where there was strong opposition to the system, no district taxes were voted, and every other means used to prevent its success. But the success of the system is already assured. In some instances inconvenience was caused by it, but the same was true under the former system. Where the school term has not been lengthened, the schools have had better supervision and the quality of work done has been better.

EDUCATION BY THE STATE.

As the education of the successive generations is necessary to the national and social welfare of the people, that they may fully understand their rights and duties as citizens of the American Republic and be enabled to secure their accomplishment, so it is also

necessary that they should be educated in accordance with the spirit and genius of the institutions which it will be their duty to maintain. "A company of anarchists can not be allowed to school their children into hatred and disloyalty to the republic, nor any religious organization to teach polygamy or the subordination of civil to ecclesiastic authority in affairs purely temporal." While it is necessary to exclude from the public schools the inculcation of the doctrines of any particular sect or religion, it is equally necessary that the pupils should have implanted in them a love and admiration for those cardinal virtues which constitute an honorable character.

IRREGULAR ATTENDANCE.

The main obstacle to the progress and prosperity of the schools is the great irregularity and tardiness of pupils. This is a cause of complaint in quite a large number of the reports from the towns. In this matter a large part of the blame attaches to the parents who not only allow their children frequently to stay at home to play, but in many cases keep them at home to go on errands or to perform some piece of work, thinking that the loss of a day or two from school is of no importance. This is an evil, however, that is with difficulty eradicated.

TEXT-BOOKS.

The State superintendent thinks that the free text-book system should be adopted, but has not urged it so far, fearing that it might be put into operation in such an unbusiness-like way as to cause dissatisfaction. He claims, however, that as the State furnishes the school with a house, seats, stove, fuel, charts, desks, etc., because it is for the public welfare, it should for the same reason furnish all the scholars with text-books, not simply the children of the poor. A child does not wish to be singled out as an object of charity, nor does it tend to develop a feeling of manliness and equality to which the children of the poor are entitled; but, on the contrary, when free text-books are furnished the poor, it develops in the other children an idea of superiority and arrogance which should not be encouraged.

An act to furnish free text-books came before the last Legislature, and was passed by the House by an enthusiastic majority, but the Senate concluded not to pass the bill at that time. It is a noteworthy fact as soon as the bill had passed the House immediately a large body of book-agents and book-sellers hastened to Concord to give the Legislature of the State instructions on the subject of free text-books.

NEW JERSEY.

[From Report for 1886-87 of State Superintendent Edwin O. Chapman.]

GENERAL STATEMENTS.

The report was rather late in being finished as the State superintendent was anxious that the statistical tables should be absolutely correct, and returned for correction several district reports in which errors had been made. All of the county superintendents whose terms expired were reelected by the State board of education except two, one of whom died. The schools throughout the State were in operation nine months and ten days at a cost of \$2,074,692, or \$9.21 for each child that attended, besides about a half million dollars expended for new buildings and repairs. The total value of the school property of the State is seven and a half millions of dollars. "The decrease in the State school tax was caused by the decrease in the census taken the previous year, and this, as explained in my last report, was due to technical errors made in previous years, because of a misunderstanding of the law."

TEACHERS AND SALARIES.

"The most encouraging facts to be noted are the increased zeal and efficiency of the teachers, and these cannot be shown by statistics. They are the direct results of the faithful labor of the county and city superintendents in the local associations, of the work done in the institutes, and of the honest efforts of the teachers themselves. The teachers' Reading Circle has contributed in no small degree to this improvement. It has opened new fields for thought and investigation, stimulated professional zeal and made the work of the school-room less irksome to the teacher and more profitable to the pupil."

Of the entire number of teachers employed, which was 4,002, only 825, or less than 21 per cent., were men; while in the cities the proportion of men was still smaller, being only about 12 per cent. "While nothing is to be said against the faithfulness and efficiency of our female teachers, it is to be regretted that more men do not find employment in the schools, especially in the large schools of the cities."

There was a decrease in district school taxes for teachers' salaries, but this was more than counterbalanced by the increase in township taxes. The average salary of men throughout the State was \$64.07, an increase of \$1.06; the average salary of women was \$41.34, an increase of 83 cents.

"This increase in salaries was in part effected by the operation of a law passed by the Legislature during the previous winter, which provides that at the close of the school year any balances of the State appropriation remaining in the hands of township collectors may be reapportioned by the county superintendent among the districts of the county. In some portions of the State, trustees had fallen into a habit of letting a portion of each year's appropriation remain in the hands of the collector, and, in many instances, those balances had accumulated until they aggregated more than the annual appropriation from the State. As the appropriations were made for a definite time, namely, the school year, and for a definite purpose, namely, the purchase of fuel and the payment of teachers' salaries, such accumulation of balances was an evasion of the spirit if not of the letter of the law. The appropriation for any single year is made for the benefit of the school children of that year, and the children of that year are entitled to it all. Very few balances have been taken up and reapportioned under the law, but the trustees have been induced to apply them to increase salaries."

As the Legislature has raised the State tax from four dollars per child to five dollars, and as this fund can only be used for payment of salaries and fuel, the teachers' pay will hereafter be much larger, probably increased from ten to twenty per cent. This is greatly to be desired, as there is no other professional class so poorly paid as the teachers, and none are more faithful and efficient than those of New Jersey.

EXPERIENCE OF TEACHERS.

As to the experience of teachers in school-work, the schools of New Jersey will compare most favorably with those of any other State; and when the terms of service in the same school are considered, no better proof of the success and thoroughness of their work could be given, for, however high may be the attainments of a teacher, nothing can supply the place of that knowledge and skill which can only be acquired by practical work in the school-room. In many cases the teachers refused flattering offers in other States, preferring to remain at the same place, although at a small sacrifice in salary. The average experience of all the teachers of the State was seven years and six months, and the average length of service in the same school was four years and eight months. Only about ten per cent. of all the teachers in the State had an experience of one year or less, while nearly fifty-five per cent. had an experience of more than five years, nearly thirty per cent. of more than ten years, and a large number had served more than fifteen years. In the city schools, if considered by themselves, the result is still more satisfactory. There the average experience of teachers is nine years and four months, and only six per cent. of them had an experience of one year or less, while more than sixty-two per cent. have taught more than five years, and about thirty-six per cent. more than ten years. The average term of service in the same school in cities is seven years and four months, the highest average being in Gloucester, where the teachers have been retained in the same schools an average of thirteen years.

TEACHERS' CERTIFICATES.

"The State board of examiners has issued during the year nine first-grade State certificates, twenty-four of the second grade, and twenty of the third grade. Great care has been exercised to place these certificates in the hands of those teachers who not only possess the academical qualifications required, but who are also in other respects thoroughly qualified. While scholarship is essential to the teacher, the ability to control and to teach is no less so, and therefore the board has not depended solely upon an examination as a test of qualification, but has required of the applicant a record of successful experience as teacher and as principal. The State certificate of the first grade is the only diploma that marks the holder as one who has fairly entered his profession, and one who is thoroughly equipped for its practice. It should be the aim of every teacher in the State to pass through the stages of apprenticeship as soon as possible, and secure this final guarantee of fitness.

"Of county certificates, 1,932 have been issued as against 1,925 during the previous year. About eight per cent. were of the first grade, and about fourteen per cent. of the second grade. This is a decided improvement over the previous year, when only four and one-half per cent. were of the first grade, and only ten and one-half per cent. of the second grade. That seventy-eight per cent. of all the teachers applying for examination are satisfied with a certificate of the lowest grade is not creditable to the aspirants; such a certificate will do very well for a beginner, but no teacher should be contented to remain on this lowest round of the ladder for any considerable time."

SCHOOL BUILDINGS.

Fewer districts raised special taxes for building and repairing, and less money was raised than in the previous year, yet thirty-three new houses were erected and other improvements made to the extent of \$223,167. Although one hundred and fifty houses are reported as "poor" or "very poor," it is very probable that a great improvement has been made in their general condition and that houses which were formerly reported as "good" are now returned "poor," their condition now being compared to new and elegant buildings while formerly they were compared to crumbling and leaky buildings which have given place to better ones. Still there are left a great many dilapidated and incommensurable houses which should be discarded. Under the law passed in 1886, school districts can borrow money at five per cent. from the State school fund for the purpose of erecting buildings, and make gradual payments until the debt is extinguished. As a large sum of money is spent annually for the erection of school-houses and as many applications are made to the State superintendent for plans and directions for buildings, he recommended that an appropriation be made for this purpose.

Not only are there many school buildings not suitable for the purpose, but there is not a sufficient number of such as there are; particularly is this true in the cities. In the entire State sixty-one per cent. of the school population was enrolled, and if the cities are taken by themselves, fifty-two per cent. were enrolled. As a great many of the school-rooms were greatly overcrowded, we can conclude that the present school buildings are very inadequate to the comfortable accommodation of the school population, and hence it is not strange that the law for compulsory education is a dead letter.

OVERCROWDED ROOMS.

So great has become the crowding of children into school-rooms, that it was thought advisable to collect the statistics on this subject, and we find that the evil is now diminishing although it has not by any means disappeared. In 1883-84 there were one hundred and sixty-two rooms having eighty pupils or more, in 1885-86 there were one hundred and seven, and in 1886-87 there were ninety-two, and of these fifty-two were in the cities.

In the entire State there were forty-one rooms having from eighty to ninety pupils, twenty-six having from ninety to a hundred, and twenty-five having more than one hundred. Not only is it impossible for one teacher to properly instruct so many children, and in the overcrowded rooms the children are usually quite young and therefore need much more personal attention, but there is great danger of serious injury to their physical health on account of imperfect ventilation and other unavoidable evils.

FURNITURE AND SUPPLIES.

In this respect a great improvement has taken place since the last report was made. Fifty-five more school-houses have been furnished with the modern patent desks, but there are still two hundred and forty-six buildings not supplied with them. Quite a number of schools have been furnished with maps, charts, dictionaries, etc. "In the matter of blackboards no improvement has been made, there still being two hundred and seventy-one schools insufficiently supplied, principally in the counties of Monmouth, Middlesex, Morris, Cumberland, and Sussex. The trustees are much to blame for neglecting to supply so important an aid to their teachers, and perhaps the teachers are not entirely blameless for not pressing the matter more frequently upon the attention of school officers."

ATTENDANCE OF PUPILS.

The last school census showed the population of school age to be 374,011. Of this number 61 per cent. attended public schools, 10 per cent. private schools, and 29 per cent. no school at all. This is a much larger number of children not attending school than can reasonably be accounted for, and shows that quite a number of the children are growing up in ignorance. A large part of the non-attending children are in the cities where it has been shown there was a great lack of school accommodations, and no doubt this was, to some extent, the cause of the non-attendance. In thirty-one cities and boroughs only eight had an enrolment of 70 per cent. of their school population, while nine enrolled less than 50 per cent. This is conclusive evidence of the need of greater school accommodations, as even with the present small attendance the schools are overcrowded.

SCHOOL TERM.

The average school term throughout the State was nine months and ten days, the longest being in Mercer County, ten and two-tenths months. Only two counties, Atlantic and Ocean, had an average term less than nine months, as required by law, the average of the former being eight and eight-tenths months; of the latter, eight and five-tenths

months. In the cities, considered by themselves, the average term was ten and one-tenth months, all of them keeping their schools open ten months except Atlantic, where the term was nine and five-tenths months.

TEXT-BOOKS.

"The constant improvement in text-books is a marked feature in the progress of our educational work. The books are now all so good that the task of selection requires a close and critical examination and an intimate acquaintance with educational methods and needs. Thanks to the conscientious care and professional efficiency of our county and city superintendents and to the honest co-operation of the local boards, there is but little to complain of in this direction.

"But however good the text-books may be, they are but little better than none at all if there be a lack of uniformity in any district. Our reports show an improvement in this respect, but there are still one hundred and thirty-four districts where there is not such uniformity.

"Decided progress is also shown in the increased number of districts that furnish text-books to the pupils. In the previous year there were one hundred and eighty-three such districts; in the past year there were two hundred and forty-four."

The arguments in favor of the free text-book plan, especially in the large cities, are too strong to be neglected, and in no way can the schools be more benefited than by the adoption of free text-books.

LIBRARIES FOR SCHOOLS.

The schools having established libraries now number eight hundred and forty-two; but, during the sixteen years the law for school libraries has been in force, many more should have been established. The appropriations for the past year amounted to \$2,780, which was distributed among two hundred and twenty-four schools. In many districts the libraries have been attended to with much care, and many additions made to them until now they serve a very useful purpose; while in other districts the books have become lost or destroyed, so that a library exists in name only. To make the libraries a success the books should be preserved with great care, and well-selected additions made to them from year to year so that the children would take an interest in them.

EVENING SCHOOLS.

Evening schools were held in eleven cities and were attended by 7,956 pupils, an increase of 632 pupils over the attendance of the previous winter. The average term of the schools was twelve weeks, and the number of instructors was 191 at an average weekly compensation of \$7.17.

NEW LEGISLATION.

Legal holidays.—By act of April 8, 1887, the following are made legal holidays: February 22, Decoration Day, Labor Day (first Monday in September), and any day on which a general election is held for members of Assembly.

Unexpended school funds.—Any balances of the State appropriation remaining in the hands of the township collectors at the close of the school year may be re-apportioned by the county superintendent among the districts of the county.

NEW MEXICO.

[From the Report of the Governor, October 10, 1888.]

"The educational interest of the Territory has not been neglected. Though there has not been that advance that was hoped, yet substantial progress has been made. A compulsory school law was passed at the last session of the Legislature, but its defects were such that it has been practically inoperative, yet it was a step in the right direction, and whatever effect it has had has been good.

"On the whole, the school attendance has been increased, larger amounts of money have been expended in the maintenance of public schools, the number of these schools has increased, as has also the number of denominational and parochial schools and the attendance thereon. The schools of the Territory generally are in perceptibly better condition, and an increased and increasing public interest in the education of the youth is very manifest."

As many of the lands set apart by Congress for school purposes are very desirably located, they are constantly appreciating in value, and some of them are already quite valuable, so that if leased they should serve to augment the school funds to a very considerable extent.

"The persistent efforts to the education of the Navajo and other Indian children are beginning to show good results. All the Indian schools are well attended, and the children are being satisfactorily inducted into the ways of civilized life and in the establishment of habits and education that can not but have a beneficial effect upon their surroundings as they return to their homes, young men and women to dominate by numbers and educated habits of life their several localities. The establishment of these schools in accessible relation to the relatives of the pupils was a wise and thoughtful measure."

NEW YORK.

UNIFORM EXAMINATIONS.

Through the exertions of Superintendent Draper a bill providing for uniform examinations of teachers throughout the State was passed by the Legislature, but it was vetoed by the Governor; nothing daunted, however, he provided sets of questions for examinations which were to be held on the same day, and appealed to the school commissioners to use them and thus secure uniformity without legislative compulsion, and in July, 1888, he was able to announce that all the school commissioners had adopted the plan.

[From Report for 1887-88 of State Superintendent Andrew S. Draper.]

GENERAL STATEMENTS.

"It may properly be said that the year has been one of marked educational activity. The department has had its hands more than full, while superintendents in the cities, commissioners in the country, and the great body of trustees and teachers everywhere have been industriously at work. It is more than doubtful if any other year in the history of the State has witnessed so much of interest, so much of effort, and, it may be added, so much of accomplishment on the part of all grades and classes of educational workers as the one which has just closed. While I have frequently said, and now repeat, that we have no such perfect school system as the present and prospective circumstances of our imperial State require, it must also be said that this fact is attributable to difficulties inherent in the organization and framework of the system, to a lack of comprehensiveness, completeness, symmetry, and practical effectiveness in the machinery of the system, rather than to lack of interest or of inclination on the part of the great body of those charged with the duty of administering it. Officers and teachers have, with rare exceptions, attended the conventions, associations, and institutes of the year; they have cordially supported all measures for improvement; they have cheerfully responded to all calls upon their time and effort, and in a thousand ways and upon innumerable occasions have manifested their strong desire for the substantial and intelligent advancement of the work, as well as their readiness to do whatever it was possible for them to do to accomplish it."

"The criticisms of the public schools which have appeared with frequency in the literary magazines, whether reasonable or not, just or unjust, have drawn the attention of educators and pointed out the necessity of perfecting a public school establishment which would be above legitimate criticism. This has inspired much thought and frequent conference with a view to a clearer understanding of the exact work which the public schools ought to undertake, as well as to bring about such an adjustment of machinery as will bring the different parts into harmonious action, economize labor and cost, and insure general results in the most satisfactory and effectual way."

"In short, on every side a new and healthful interest in public school work on the part of those charged with the carrying on of that work is apparent. That interest is active, substantial, wide-spread, and conscientious. It is already exerting a perceptible influence upon the schools, and I am confident it will not be long before it will be much more strongly felt."

ATTENDANCE.

The statistics with reference to attendance at school furnish occasion "both for some satisfaction and considerable solicitude. They show that the school work of the State has grown somewhat in substantial character during the last thirty years, but that there is comparatively a smaller attendance upon the schools than formerly." Since 1861 there has been a remarkable increase of 135 per cent. in the school population of cities, but in the towns there has been an actual decrease of 15 per cent. Both the total number of children attending schools and the average daily attendance have gradually increased, but the per cent. of the whole number of children of school age in attendance upon schools has as uniformly decreased. In 1851 the per cent. of school population in attendance upon schools was 75.6; in 1861 it had fallen to 65.2; in 1871 to 68.4; in 1881 to 61.4; and in 1888 it was 53.2, smaller than in any previous year.

COMPULSORY ATTENDANCE.

This decrease in the proportion of children attending school was found to be so continuous and uniform that it was thought by school officers and others cognizant of it that inactivity would no longer be justifiable. Accordingly, after much investigation and labor a bill was prepared by a committee of city superintendents, and presented in the Assembly where it received a favorable report from the committee on education, but it failed to become a law. The failure of the Legislature to pass the bill will not, however, deter the friends of education from further efforts, as it is recognized by all that the present law is inoperative, indefinite, and without adequate provision for its enforcement. The State superintendent was anxious to obtain all information possible as to the best methods of securing full attendance at school, and so he addressed letters to the American ministers at London, Paris, and Berlin, making inquiries as to the methods of education adopted in those countries, and in all of them it was found that the children were required to attend school, and indigent children were furnished with clothing, and meals in the middle of the day.

TEACHERS.

Of the 31,726 teachers in the public schools during the year, the number reported as having been employed for a continuous term of twenty-eight weeks or more was 23,052. A circumstance much to be regretted in connection with the public schools is the frequent changing of teachers. During the past year efforts were made to ascertain the number of terms each teacher had taught in the same district, and of the 10,631 districts reporting this item, in more than one-half of them the teachers had taught the same school but a single term, and in more than four-fifths of them the same teacher had not been employed longer than a single term.

"Worthy teachers, practically without power to protect themselves, and deserving nothing but regard and help from the public, are made the foot-ball of school district politics or family feuds, or are persecuted through the petty spite ordinarily aroused in narrow-minded parents by any efficient discipline in the school. There are, moreover, trustees who seem to think that they are chosen to be dictators and a law unto themselves, rather than the administrators of a great system organized and governed by law, and who put their misconceived notions into effect, and, as the most convenient means of showing their authority, gratify their self-importance principally at the expense and discomfiture of the teacher.

"It is incumbent upon the State to see that only persons of unquestioned moral character, of aptitude for the work, and of ample qualifications, shall be permitted to teach in the schools, and it is endeavoring to do this with thoroughness, in ways to which I shall presently refer. Having secured character and qualifications in a teacher, it is bound to throw around the position such safeguards as will make it tolerable and self-respecting.

"In cities teachers are employed at least for the school year. Very commonly they are employed for an indefinite time, the practical effect of which is continuous service so long as ability to fill the place continues. Any attempt to remove a teacher in the middle of a school year without good reason would be resented by public sentiment, as it ought to be.

"But this is not so in the country; at least it is the exception rather than the rule. There the trustee attempts to employ a teacher 'as long as she suits,' or 'gives satisfaction,' for the very purpose of being able to dismiss her at any moment when some simple incident transpires which is not in accord with his poor ideas, or because he may prefer to give another the place."

TEACHERS' CERTIFICATES.

According to the law of 1875 certificates of the State superintendent can only be issued upon examination. During the thirteen years previous to that time the State superintendent issued two thousand and eighty-eight certificates; during the subsequent thirteen years he issued only three hundred and nineteen. The old certificates are not highly appreciated by either teachers or school officers; the new ones are regarded as of the highest value. These certificates are issued only after a searching examination, and no one is eligible to try this examination until after two years' experience in teaching.

The State superintendent has made arrangements with the superintendents of several States by which the certificates given by the State superintendent or a normal school of one State shall be recognized in the other. The system of uniform commissioners' examinations has been adopted throughout the entire State, and it is giving entire satisfaction. The whole number of candidates examined was 21,156, of whom 645 received first-grade certificates, 6,063 received second-grade certificates, and 9,469 received certificates of the third grade. The third-grade certificates are only valid for six months, and are renewable only once upon examination; the second-grade certificates are valid

for two years, and are renewable only upon examination; the first grade certificates are valid for five years, and are renewable, in the discretion of the commissioner, without examination. Some anxiety was felt as to whether there would be a sufficient number of licensed teachers to supply the schools, but there was little trouble from this cause.

TEACHERS' INSTITUTES AND CLASSES.

The whole number of teachers attending the institutes during the year was 16,214, the average number to each institute being 147. Conductors, school officers, teachers, and patrons all unite in testifying to the successful operation of the institutes, the useful instruction given, and the great benefits received.

In order to increase the number of teachers who had received special professional instruction, the number of graduates of the normal schools not being sufficient to supply the schools, provision has been made by the State for a number of years for teachers' classes in academies and union schools. These classes are under the management of the board of regents of the university. During the past year there were 195 of these classes, in which 3,258 students received instruction for ten weeks or more, at a cost to the State of \$33,091. These classes have hitherto failed to accomplish the work desired and expected. They should be reorganized and should have a much longer term than ten weeks. At a conference of the academic principals a resolution was adopted that, in order to increase the efficiency and usefulness of the teachers' classes, they should be placed under the management of the department of public instruction, as they would then be in closer relation with the other agencies for the instruction of teachers.

INDUSTRIAL AND FREE-HAND DRAWING.

There can be no doubt as to the advantages to be derived from manual training both in an educational and utilitarian view. As to whether the incongruous and irrelevant work advocated by some should be incorporated in the regular school work, however, is an entirely different question. The training of the eye and hand can be most fully and advantageously accomplished by thorough training in free-hand and industrial drawing, not simply drawing from copies, but from actual models. Strong efforts have been made during the past year to secure full compliance with the law requiring free instruction in this department to be given in cities and union free school districts. In some places the law was not complied with. Special attention has been given this subject in the teachers' institutes, and, after a little more time for preparation and improvement, it should be included in the examination of teachers.

LIBRARIES.

New York was the first State to begin the establishment of libraries in connection with schools. From 1839 to the present time an annual appropriation of either fifty or fifty-five thousand dollars has been made for libraries, but good libraries are not yet generally established. In 1853 the number of volumes reported in district libraries was 1,604,210; since that time, although the appropriation has been continued regularly, the number of volumes has regularly decreased until in 1887 the number of volumes was 737,716. The most of these are in the cities and large towns where there are other libraries, and where they are consequently not needed so much as in the isolated rural districts. There are many ways in which to account for these failures. The selection of books was left to the district trustees, who were frequently incompetent to discharge the task properly, book-cases were not provided and the books were not carefully looked after, and in many cases, especially where the amount was small, the money was diverted to other purposes.

Inquiries were sent out during the past year to many men prominently identified with the interests of the State, and to many librarians, asking their opinion as to the advisability of continuing the district libraries and, if continued, how best to improve them. They were almost unanimously of the opinion that the libraries should be continued and enlarged.

The libraries at first established were intended to be public libraries, and the management of them simply was intrusted to the teachers.

SCHOOL-HOUSE DESIGNS.

According to the authority granted by the Legislature in 1887, a number of designs for school-houses of low cost were obtained from different architects, and have been published, and received general commendation. The designs were accompanied with suggestions relative to school grounds, ventilation, lighting, heating, etc. Many applications have been received from all parts of the country for specifications and estimates necessary for the construction of the buildings. The designs serve the double purpose of emphasizing the importance of artistic and well-adapted buildings, and of securing their erection at the least cost.

OUT-BUILDINGS.

"Strenuous efforts have been made during the year to secure the general execution of chapter 538 of the laws of 1887, which provides that each school building shall have water-closet accommodations for each sex, and entirely separated each from the other, and which shall be of suitable character and kept in proper condition."

"The result has been a very general compliance with the statute, and an overhauling of school out-buildings such as the State never before witnessed. Still, there are some slow districts. School commissioners have been required to certify that all districts in their territory have complied with the law, or to specify the ones which have failed to do so, and their reports show a few which have neglected the matter."

There should be a sanitary inspector of public school buildings whose duty it should be to see that all public school property was kept in a condition of healthfulness and comfort.

SCHOOL MEETINGS.

The time of the annual school meetings is the second Tuesday in August, and the schools usually begin in the first or second week of September. This does not afford a sufficient interval for trustees to get the buildings in proper order, and for the employment of teachers. It frequently happens, too, that teachers expect to teach in the same school but by a change of trustees they are thrown out of employment and have not sufficient time to make proper arrangements for the next term. The school meeting should be held at least a month earlier.

INDIAN SCHOOLS.

There are 1,546 Indian children of school age in the different reservations in the State. There are thirty schools for them, and the number of children enrolled last year was 1,032; the average daily attendance 420. The average duration of the schools was thirty-six weeks.

Great care has been exercised in the management of these schools; good teachers have been employed, new school-houses erected, and old ones repaired, so that the general equipment of the schools has been better than that of most of the ordinary rural schools.

ARBOR DAY.

According to the laws of 1883 the Friday following the first day of May in each year shall be Arbor Day. Programmes of suitable exercises for the occasion will be issued, and it is hoped there will be a general observance of the day so that encouragement may be given to the planting and preservation of trees and shrubs.

PEDAGOGICS IN COLLEGES.

Quite a number of graduates of colleges become teachers, and it would be well if more of them did so. In a few colleges provision is made for regular instruction in pedagogics. It is thought that it would prove highly satisfactory to teachers and a large portion of the students if the department of public instruction were authorized to furnish courses of lectures for two or three weeks annually on education, school management, and school methods in the different colleges desiring them.

APPORTIONMENT OF PUBLIC MONEYS.

Hitherto the money supplied by the State superintendent to the counties, in addition to the district quotas, has been apportioned as follows: One-half according to the school population, the other half according to the average daily attendance. But, as the average daily attendance was higher where the terms were shortest, those counties which maintained schools for the minimum term of twenty-eight weeks received most money.

The Legislature of 1887 changed this so that the aggregate number of days' attendance should take the place of average daily attendance in the apportionment of funds.

It is recommended by the State superintendent that the minimum school term be made thirty-two weeks instead of twenty-eight.

NEW LEGISLATION.

A memorandum of the contract to be given each teacher.—An act passed by the Legislature May 16, 1887, requires that there shall be delivered to each person employed as a teacher in a public school a memorandum of "the details of the agreement between the parties, and particularly the length of the term of employment, the amount of compensation, and the time or times when such compensation shall be due and payable," and it is required that the pay shall be due "at least as often as the end of each calendar month of the term of employment."

In relation to water-closets.—"The board of education, or the trustee or trustees having supervision over any school district of this State, shall provide suitable and convenient

water-closets or privies for each of the schools under their charge, at least two in number, which shall be entirely separated each from the other and having separate means of access, and the approaches thereto shall be separated by a substantial close fence not less than seven feet in height. It shall be the duty of the officers aforesaid to keep the same in a clean and wholesome condition and a failure to comply with the provisions of this act on the part of the trustees shall be sufficient grounds for removal from office, and for withholding from the district any share of the public moneys of the State."

Evening schools for free instruction in industrial drawing.—Authority is given the school officers "to establish and maintain evening schools for free instruction in industrial drawing, whenever the city authorities in any city or the qualified electors duly convened in any union free school district shall so direct, and shall make provision for the maintenance of such schools. In addition to the powers now conferred by law upon the authorities of any city, or upon the electors of any union free school district in the State, such authorities and such electors shall also have power, whenever they shall think it advisable, to raise such moneys as shall be necessary to carry out the purposes of this act."

The following laws and amendments to laws were passed by the Legislature of 1888:

Teachers' certificates may be granted certain persons without an examination.—The State superintendent of education may, in his discretion, issue a certificate without examination to any graduate of a college or university, who has had three years' experience as a teacher, such certificate to be known as a "college graduate's certificate," and may be revoked at any time for cause. He may also, in his discretion, indorse a diploma issued by a State superintendent or a State board of education of any other State, which indorsement shall render them equivalent to like diplomas and certificates granted in the State of New York. He may also issue temporary licenses to teach, limited to any school commissioner district or school district, and for a period not exceeding six months.

School commissioners may make repairs or additions to school furniture.—The law relating to the powers of school commissioner was so amended that he may direct the trustee to make any repairs or additions to school furniture deemed necessary, provided the expense shall not in any one year exceed one hundred dollars.

School commissioners may issue subpoenas to compel attendance of witnesses.—When directed by the superintendent of public instruction the school commissioner may issue subpoenas to compel the attendance of witnesses, and upon failure to attend the delinquent may be fined by the county judge twenty-five dollars, and in case such penalty is not paid, he may be committed to jail for twenty-five days.

Town clerks to distribute books.—It was made the duty of the town clerk to distribute to the trustees of the school districts and separate neighborhoods all books forwarded to him by the State superintendent or school commissioner for that purpose.

Site not to be changed without the consent of the school commissioner.—The law relating to changing the site of school-houses was amended so as to require the written consent of the school commissioner having jurisdiction before such change can be made.

School commissioner to appoint trustee to fill vacancy.—In case a vacancy in the office of school trustee is not filled in one month's time the school commissioner of the commissioner district may appoint some competent person to fill it, and shall file the appointment in the office of the district clerk; he may also accept the resignation of any school district officer. When a vacancy occurs in the board of trustees of a union school district, and the board makes no provision for filling it and no election is ordered for that purpose, it may be filled by the school commissioner having jurisdiction. But the superintendent of public instruction may order a special election to fill such vacancy.

No order or draft to be given unless there is money to meet it.—It is made a misdemeanor, punishable as such, for a trustee to give an order or draft upon a supervisor or collector unless such officer shall at the time have sufficient funds to meet the obligation.

Union free school districts may issue bonds for making additions to school-houses.—The law relating to the issuing of bonds by union free school districts was so amended that bonds may be issued for securing money to make additions, alterations, or improvements to buildings or structures belonging to the district.

Salary of deputy superintendent.—The salary of the deputy superintendent was fixed at four thousand dollars per annum.

Arbor Day established.—The Friday following the first day of May in each year was made Arbor Day, and it is made the duty of the school authorities of each school in the State to assemble the pupils upon that day in the school building or elsewhere, and to provide for and conduct such exercises as shall tend to encourage the planting, protecting, and preserving of trees and shrubs, and an acquaintance with the best methods to be adopted to accomplish such results. The State superintendent is authorized to prescribe a course of exercises and instruction in such subjects to be observed on that day.

Industrial training provided for.—Boards or departments of education of cities and villages

and of union free schools and trustees of public school districts are authorized to establish departments in their schools for teaching and illustrating the manual or industrial arts, and to establish and maintain such shops as may be necessary for this purpose whenever the authorities now authorized by law to raise money by taxation for school purposes shall make provision for such departments, which they are now authorized to do. The State normal and training schools are required to include in their courses of instruction the principles underlying the manual or industrial arts, and also practical training in the same to such extent as the State superintendent may direct, and to such further extent as the local boards of such schools may direct.

NORTH CAROLINA.

[From Report for 1886-87 and 1887-88 of State Superintendent S. M. Finger.]

GENERAL STATEMENTS.

The statistical returns show that there has been a slight increase in school population, enrolment, and attendance. During the last four years the number of white children has increased 13.2 per cent., while the colored children increased 11.2 per cent. The increase in enrolment and average attendance of white children was a little greater than that of colored children. It is frequently stated that the colored children attend the public schools better than the white children, but the returns show that it is untrue. Besides, a large number of white children attend private schools. It should not be inferred from the fact that only 58 per cent. of the children are enrolled that the remaining 42 per cent. never attend school at all. Many of those not enrolled have already attended school, perhaps for several years, others will attend afterwards, while others still are attending private schools or colleges. The schools have enrolled a larger per cent. of the total population of the State than we find enrolled in several of the States where the public schools have been placed in a very prosperous condition.

While some improvement has been made in the condition of the school-houses, a large number of them are unfit for use, and, in many cases, it is with risk to the health of the children that they are used.

One of the worst features of the public schools of the State is the short length of time they are in operation, the terms varying from two to four months, the average being only about twelve weeks. It is, of course, impossible for the schools to accomplish much in such short terms. When it is considered that several other Southern States, situated in the same way and laboring under the same difficulties, have much longer school terms, it would seem that the people of the State are not doing all they can towards the improvement of the public schools.

TEACHERS.

There are many teachers throughout the State who are yet only school-boys and school-girls, without a sufficient knowledge of the studies they must teach, and especially without a knowledge of the best methods of imparting instruction and of governing a school. It is a very prevalent idea that it is only necessary for a person to understand the different text-books in order to make a successful teacher, but very great changes have been made in the methods of teaching, and as the public schools are permanent institutions, and those who become teachers in them are likely to remain so for several years, it is desirable that they acquire at first the knowledge which has been obtained by others after years of experience. The superintendent thinks that it would be well if some instruction as to the methods of teaching were given in the State University and the different colleges, but that a regular training school for white teachers should be established, eight thousand dollars per annum already being given to the normal schools of the colored people. The training school should be so conducted that the professors would have time to hold county institutes for two or three months in each year.

COUNTY SUPERINTENDENTS.

It is urged that there are very strong reasons why the county superintendents of schools should be made treasurers of the boards of education, and so handle all of the school money, instead of it being done by the county treasurers as is now the case. At present the county superintendent is paid from two to three dollars per day for the work done, while the county treasurer gets a larger amount for simply handling the money, which is a manifest injustice. Under the system before the War the county superintendent was paid two and one-half per cent. for managing the school funds, and if he visited the schools he was paid an additional amount. The expense of the school management then was about the same as at present, but the superintendent got the benefit of it all, and so, as the remuneration was greater, better men could be obtained as superintendents. There is much greater need of competent superintendents now than

then, as there is much more work for them to do, and much greater need of supervision. While examinations serve as a primary test of the competency of teachers, the ultimate test can only be made in the school-room, and should be made by the superintendent, and the teacher graded accordingly. It is highly important that such legislation be made as will transfer the management of the school funds to the county superintendents, and if done the commission for its management may be reduced from three to two per cent., which will save a considerable amount. It would add very much to the convenience of teachers, committeemen, and others, and would secure to the State superintendent prompt reports of the receipts and disbursements of funds—something which he has not been able to obtain from county treasurers.

SCHOOL FUNDS.

The chief cause of inferior school-houses and insufficient teachers is the want of sufficient funds. While the amount spent for school purposes throughout the United States was about two dollars per capita of the total population, in North Carolina it was only thirty-nine cents per capita. The Constitution of the State requires the General Assembly to provide for the maintenance of a system of public schools by taxation and otherwise, and it is a mistake to suppose that measures for this purpose will be unfavorably received by the people. It is true that the people of the State are poor and should be taxed as little as possible, but on account of this poverty the public schools are a greater necessity, in order that the children may be educated at home.

MANUAL TRAINING AND INDUSTRIAL EDUCATION.

In this respect the boys and girls in the rural districts have an advantage over those in the cities, for the work that a farmer boy has to do—sharpening plows, repairing machinery, making hoe-handles, ax-handles, etc.—requires him to reason, think, and observe. The girls, too, find abundant work in the field and house to keep both brains and hands busy, and to secure mental and physical development. Three-fourths of the people of the State are agriculturists, and, as soon as it can be done advisably, some instruction should be given in the public schools as to the elementary principles of agriculture.

OPPOSITION TO PUBLIC SCHOOLS.

Superintendent Finger states that it is needless to disguise the fact that there is strong opposition in North Carolina to the public school system. This arises in the first place from the sentiment that it is wrong to tax one man to educate the children of another. Those who hold to such opinions consider the education given by the public as a *charity*, just as when food is given to those suffering from want. But this was not the principle upon which State education was founded. It was thought necessary that the people be educated in order that they might properly discharge their duties as citizens, and secure the safety of the established institutions; and it was recognized that the material progress and prosperity of the people depended to a large extent upon their intelligence; proofs of which can be easily found in our own country.

Another cause of antagonism to the public schools is the heavy burden of taxation cast upon the impoverished white people of the State who pay nearly all the taxes which go to support the schools of both whites and colored. This antagonism is intensified by the prevalent opinion that education spoils the negro as a laborer. It is estimated, too, that from fifteen to twenty thousand negroes do not list themselves for taxation, and a large portion of those listed fail to pay the tax, so that in these two ways there is a loss to the school fund of about seventy-five thousand dollars, besides a loss to the poor fund of twenty-five thousand dollars.

PRIVATE SCHOOLS.

Although it was impossible to get full information as to the private schools and colleges of the State, the statistics are sufficient to show that this is a very important item and becoming more so every year. About twenty-five thousand of the young people of the State are attending them. It is a matter of congratulation that the efforts made to raise endowments for the different colleges of the State have been so successful, but efforts should be made to establish institutions for the young women also.

RECOMMENDATIONS.

The following recommendations were made to the Legislature: That the law be so amended as to require the condemnation of houses unfit for use and the construction of better ones.

The establishment of a thorough system of county institutes and examination of teachers, and that all teachers be required to attend the institutes.

The establishment for the whites of a teachers' training-school, and an appropriation for this purpose and for the county institutes of \$10,000 per annum.

The abolition of the present summer normal schools.

If the financial condition of the people will bear it, an additional annual appropriation by the General Assembly, to be distributed to such districts as will supplement by private subscriptions their school fund, and to such towns, townships, and cities as supplemented their funds by special taxes.

More active supervision by county superintendents and better pay for them.

Severe penalties upon all officers who have anything to do with levying, collecting, or disbursing school funds if they fail to perform their respective duties.

That the county superintendent be made the treasurer of the board of education.

An amendment to the constitution allowing taxation for schools beyond 66 $\frac{2}{3}$ cents on \$100 of property, and \$2 on the poll.

That teachers shall be examined on some work on methods of teaching and school management.

That the fiscal year of schools close June 30 instead of November 30.

OHIO.

For information contained in this report relating to education in Ohio consult the Index. If the State School Report is received in season, an abstract of it will be given at the close of this volume.

OREGON.

[From Report for 1886-87 and 1887-88 of State Superintendent E. B. McElroy.]

In compliance with the laws of Oregon, the superintendent visited many of the schools of the State, and he made close inspection as to the condition of school-buildings as regards ventilation, lighting, and heating, neatness of rooms, the condition of the school grounds, the attendance of pupils, the methods of the teachers, etc.

In some places the school buildings and the care of the school grounds gave strong evidence of enterprise and progress; but in others the very reverse was true—buildings dilapidated, grounds unenclosed, no shade trees, and a general appearance of a want of progress. In the towns and cities the schools were usually in a flourishing condition, good teachers were employed, and the furniture was of the latest and most improved character. The superintendent also visited some of the best schools of Iowa, Missouri, Illinois, Indiana, and Pennsylvania.

PUBLIC EDUCATION.

Schools and higher institutions of learning are established in all parts of the State, so that a free education is offered to every youth, and the avenues to success and honor are open to all. Hundreds of intelligent men and women have been added to the communities, and the benign influences of the schools are found on every side; and as the public schools have now become an established institution, it only remains for the people to strengthen, improve, and elevate them.

DISTRICTS.

The reports of the county superintendents show that in March, 1883, the number of organized school districts in the State was 1,518. Some of these districts were very large, fifteen to twenty-five square miles, while the average size of the districts was about nine square miles. The boundaries of the districts are very irregular, and in some cases the districts are divided by deep ravines or rocky spurs. In some districts which are very large the schools are located near the centre, and some of the children are required to go for miles to school; but in the more populous communities the districts are small, the school-house is within easy reach of all the pupils, and consequently the attendance is more punctual and regular. The board of directors of each district has the authority to locate the school-house, and in all cases it should be done with reference to the convenience of the pupils and the future growth of the community.

SCHOOL CENSUS.

"The annual census made by school clerks in 1887 gives an enrolment of 87,217 persons who drew public school funds. The census completed March 5, 1888, gives an enrolment of 86,574, a decrease in one year of 643. It would appear from this that our State is on the decline rather than advancing. This is not correct. On the contrary, it is well known that, in addition to the natural increase in the State, the immigration from March, 1887, to March, 1888, was large, and, in the major portion of it, permanent. The decrease appearing above, therefore, is not real. The new law controlling the census report was approved February 17, 1887. Prior to that time the methods adopted in making the annual census returns were exceedingly careless and reckless.

"It was not uncommon for children to be enrolled in *two* districts, and in some instances in *three*. The new school law requires each clerk to enroll for school purposes all persons in each district over four and under twenty years of age. This census must contain the names and ages of all children of the school ages mentioned above, and shall also contain the names of all parents and guardians resident in the district. This enumeration is to include all youth who, at the time of taking such enumeration, actually dwell or have their home in the district."

The good results of the new law are already apparent in securing correct and accurate returns. The number of children receiving a *pro rata* share of the public funds is not the result of estimates and exaggeration.

COUNTY SUPERVISION.

In some counties of the State the salary of the county superintendent is so small that the office is a merely nominal one, and no interest is taken in the election of a suitable person. This is a great mistake. A competent and energetic school superintendent would be of great assistance to the schools in introducing new methods, giving directions to teachers, assisting in classifying the pupils, and in many other ways. Especially in a new State like Oregon, where the population is rapidly increasing and many new enterprises are being undertaken, would a county superintendent be of great benefit to the schools.

TEACHERS.

The demand for earnest, progressive teachers is increasing throughout the State, and the teachers already in service are making many improvements, adopting new methods, and qualifying themselves for more efficient service. There is a tendency among some of the directors to employ cheap teachers, and frequently a young, inexperienced teacher is employed because he can be engaged for less money, or because of the importunities of some of his relatives; and in this way the experienced and thoroughly qualified teachers are driven into other businesses or to States where they will be better appreciated.

Teachers, in order to do their work well, should thoroughly understand it, and they should not attempt to cover too much ground, but instead should endeavor to make the children understand fully what is taught.

SCHOOL-HOUSES.

From the reports of the county superintendents it is estimated that the number of school-houses in the State at the close of the year 1888 was about fourteen hundred and fifty, about ninety per cent. being frame buildings, the remainder being of bricks or logs. During the last six years about one hundred buildings, on an average, were erected each year. Many of the school-houses are comfortable and elegant buildings, but others are in a bad condition, and in some cases unfit for use.

In a late edition of the school laws, as well as in the biennial report of the superintendent, plans and directions for village and rural school-buildings were given for the guidance of school officers and patrons. When possible the school-house should be erected in the centre of the district, rather than the centre of population, as the latter is liable to change. It should be situated on a gently rising elevation, and attention should be given to proper lighting, heating, and ventilation; cloak rooms should be provided, and a closet for the safe-keeping of movable articles.

NEW LEGISLATION.

Teachers' examinations and certificates.—The new law relative to teachers' examinations, approved February 21, 1887, is as follows: In each county there shall be a board of examiners, consisting of the county superintendents and two competent persons appointed by the county superintendent, who shall serve one year, and each shall receive three dollars per day for the time actually employed in conducting the quarterly examinations, which shall be held on the last Wednesday of February, May, August, and November of each year.

Certificates shall be of the first, second, and third grade, and shall continue in force for two years, one year, and six months, respectively. Certificates of the first grade shall not be issued to any one under eighteen years of age, nor to any one who has not taught successfully for at least twelve school months, and then only when he or she shall have stood an examination on all the branches required by law, and shall have answered ninety per cent. of all questions asked, falling below seventy per cent. in no branch. Certificates of the first grade may be renewed once upon the payment of a fee of two dollars and fifty cents.

Certificates of the second grade shall not be granted persons under seventeen years of age, and then only when they shall have stood an examination, making an average of eighty per cent. on all branches, falling below sixty per cent. in no branch. Certificates of the third grade shall only be granted those persons who make an average of not less than seventy per cent. on all the branches, falling below forty per cent. in no branch.

RECOMMENDATIONS.

- (1) The schools should be closely inspected by the directors.
- (2) Each school should be supplied with a dictionary and the necessary apparatus.
- (3) The salaries of teachers should be graded according to the experience and grade of certificate held.
- (4) Directors should employ experienced teachers for the primary grades.
- (5) Successful and efficient teachers should be retained and their pay increased.
- (6) A longer and continuous school term should be established.
- (7) A graded course of study should be established in each county.
- (8) County superintendents should devote their entire time to general and local supervision, and should receive adequate salaries.
- (9) Normal institutes should be established in each county.
- (10) Teachers' associations should be established.
- (11) School districts should be required to build wood-sheds and other necessary out-houses for the health and comfort of teachers and pupils.
- (12) Public examinations of the schools should be held at the close of each term by the county superintendent or his deputy, and promotions made and diplomas granted.
- (13) New school districts should be required to establish a school at the expiration of one year after organization.
- (14) School moneys should be apportioned on a basis of the actual total attendance, instead of the total school population between the ages of four and twenty years.
- (15) The rate-bill plan of securing funds should be eliminated from our school system.

PENNSYLVANIA.

[From Report for 1887-88 of State Superintendent E. E. Higbee.]

GENERAL CONDITION.

The year 1887-88 was one of unusual progress in the public schools of Pennsylvania. An advance along the whole line seems to have been made. Although there were two hundred and eighty more schools than in the previous year, yet the school term was longer, being, exclusive of Philadelphia, where the term is ten months, 7.17 months, while in the previous year it was only 6.71. This is to be attributed in great part to the requirement of six months as the minimum school term. It was expected by many that, as a result of lengthening the minimum term, the monthly salaries of teachers would be reduced proportionally, but on the contrary there never has been so large an increase in the money paid to teachers. Large and well-arranged school buildings have been erected in New Castle, Phillipsburg, Braddock, Williamsport, Harrisburg, Bedford, Kittanning, and elsewhere. Many libraries have been organized and others enlarged. Freehand and mechanical drawing have been introduced in many of the schools.

SCHOOL CENSUS.

The number of pupils now enrolled in the public schools, exclusive of those in Philadelphia, is 831,367; an increase over the previous year of 10,556. After making all due allowance for those who attend private schools, this still leaves a large number of children of school age who attend no school. As no yearly enumeration of the children is made, it is impossible to determine definitely the number of those who do not attend any school. It is therefore recommended that it be made the duty of the district directors to make an annual enumeration of the children in their districts, so that the number not attending school can be ascertained and steps taken to secure their attendance.

SUPERVISION.

"No one at all acquainted with educational work can fail to recognize the necessity of close inspection. In our city schools, where generally the interests of education are well advanced, and great pride is taken in its success, careful inspection is, in most cases, secured. Professional educators, of superior attainments and skill, are employed, with such remuneration as their high standing demands. But in our rural districts and smaller villages, where an inspection of kindred character is perhaps even more needed, this important matter has been too much and too long neglected.

"Our county superintendents have done a great work since 1854, but their fields of administration are so large as to render any close inspection upon their part impossible. They need help. Their own work, to be made thorough and efficient, must be supplemented by the aid of assistant district superintendents. How can one man attend to the general matters of county school administration and at the same time carefully inspect from two to four hundred schools in districts scattered over the whole area of a county? It is simply impossible."

MANUAL TRAINING AND INDUSTRIAL EDUCATION.

Superintendent Higbee thinks that the sphere of the public schools embraces more than the ordinary studies—arithmetic, history, geography, writing, drawing, etc.—and that a certain amount of manual training and industrial education should be included; that the girls should be taught “household economy, embracing the nature and kinds of marketable foods, with the proper methods of their preservation and of their preparation for the table; a knowledge of textile fabrics and their construction into garments and decorations, the handling of the needle and sewing-machine, and information and practice referring to all that must ordinarily challenge a prudent and intelligent housewife;” that the boys should be instructed as to the “different kinds of soil and their value for agriculture, and the proper treatment of the same; the different varieties of timber which our forests yield and the methods of their preparation for market; the handling of the ordinary tools which workers in wood and metals use, and the keeping of them in proper repair.” He does not wish to be understood to say, however, that the schools should teach trades, turning out boys as printers, carpenters, shoemakers, etc.

In the cities and larger towns manual training and industrial schools should be established, where those desiring to do so could pursue the course still further. Polytechnic instruction, also, should be introduced.

The Legislature, at its session in 1887, adopted the following resolution:

“Resolved, That the Governor is hereby authorized and requested to appoint a commission consisting of not more than five persons, citizens of this Commonwealth, to make inquiry and report to the Legislature at its next session, by bill or otherwise, respecting the subject of industrial education, including an examination of the extent to which it is already carried on in Pennsylvania and elsewhere, the best means of promoting and maintaining it in its several grades, whether by State or local action alone, or by both combined; how far it is possible or desirable to incorporate it into the existing system of public instruction, the best method of training teachers for such schools or departments, and what changes, if any, are required in the existing system of normal schools to enable them to provide such training or to meet more fully the needs of the system of public instruction as now organized in this State, with such other inquiries as the commission may itself institute or be requested by the Governor to undertake. The members of the commission shall serve without compensation, except for necessary expenses and clerk-hire actually incurred and approved by the Governor.”

PHYSIOLOGY AND HYGIENE.

The introduction of the study of physiology and hygiene has been attended with no difficulties, but has met with much favor from both teachers and pupils. The instruction has been given mainly as a *science*, with special reference to the physical evils, little attention being given to the moral side of the question. In order to strengthen pupils in their determination to avoid the physical evils consequent upon intemperance, they should be instructed as to its moral and social evils also.

FREE TEXT-BOOKS.

School directors are authorized by law to furnish free text-books to their schools, if they see fit; and this authority is being exercised more and more every year, not only in the cities but in the rural districts, as well; and it invariably gives general satisfaction. It is found to be more economical; it saves much time at the opening of schools, on account of pupils being supplied with books at once, and it secures a much larger attendance, as parents with large families are no longer frightened by thoughts of a long bill for school-books and stationery.

RHODE ISLAND.

[From Report for 1887-88 of State Superintendent Thomas B. Stockwell.]

GENERAL STATEMENTS.

The schools of Rhode Island are reported to be in a prosperous condition, well attended, taught by an unusually well qualified corps of teachers, and giving general satisfaction. Much interest in the practical questions of the schools is being manifested by the people, and a strong desire shown for their continued and increased prosperity.

There has been an unusually large increase in the number of graded schools, but the small district schools are gradually disappearing. The average length of the schools of the State is nine months and eleven days, an increase of one day over last year, which may be attributed to the increase in the number of graded schools, all of which have a session of forty weeks.

ATTENDANCE.

The percentage of attendance at all schools to the whole school population is 78.6, a decrease of 2.7 per cent. from last year. There were 4,667 children between the ages of seven and fifteen who did not attend any school, an increase of 436 over last year. The increase in the average number belonging and in the average attendance did not correspond to the increase in the number of pupils enrolled. This is accounted for, to some extent, by the children being kept at home during the prevalence of scarlet fever, diphtheria, or other contagious diseases; the enforcement of the law requiring the attendance of children at school for twelve weeks also tends to diminish the average attendance for the year of the number of pupils enrolled, many of them leaving school as soon as the compulsory term has expired.

When we consider the large amount of money spent upon the public schools of the State, and the efforts made to render them attractive and profitable, it is greatly to be regretted that, on account of the indifference of parents and the selfishness of employers, so many children do not avail themselves of their great opportunities. The truant law should therefore be more rigidly enforced, and the children should be required to attend twenty weeks instead of twelve. "In the forty weeks spent in the workshops, children forget what they have learned and go back to school to begin over again the lessons of the year before. Discouraged, listless, old before their time, they grow up to manhood and womanhood with no adequate conception of their life's work." It is thought that if the appointment of truant officers was made by the State board of education or some central authority, instead of being given as a reward for party service as at present, the law would be more strictly enforced.

TEACHERS.

The total number of teachers employed was 1,333, of whom only 170 were males. The number of male teachers is growing gradually less, a fact much to be regretted and avoided if possible, not because men are necessarily better teachers than women, but because both sexes should be employed, each having characteristics not possessed by the other. The two types of mind and heart are distinct and were designed to have their combined effect on the youthful character. Any scheme of education and training that leaves out either is defective and can not secure that symmetrical development which is possible under the other plan.

There was an increased number of teachers who had received their education at colleges and universities and particularly at the normal school. This indicates that the teachers were better qualified to discharge their work successfully and satisfactorily. One serious obstacle to effective work, however, is the frequent change of teachers, one-fourth of the whole number holding new positions. The most of these changes were in the small schools, where the qualifications of teachers are not accurately determined.

FINANCES.

The total amount raised for schools was \$930,840.25, an increase over the previous year of \$26,615.09. By the late amendment to the Constitution of the State the registry tax is abolished. The income from this source last year was \$19,773.15, and the school funds hereafter will be about that much less than heretofore, unless provision is made for supplying the deficiency.

In reckoning the cost of instruction some interesting facts appear. Though we have paid some \$13,000 more for teachers' wages than last year, we have reduced the cost on the enrolment 37 cents per head, and on the average attendance 19 cents, while a single month's instruction for each pupil remains the same as last year.

EVENING SCHOOLS.

These have succeeded well and have accomplished much good for many who from different causes failed to secure an education during their childhood. It was mainly for such persons as these that evening schools were established, and they should not be opened to those who have the opportunity of attending the day schools. The evening schools of the last year had shorter terms and older pupils than formerly. Their success should not be estimated by the number of pupils attending them, for in many cases a large number of pupils is the cause of failure. Evening schools have succeeded best in those places where they have been longest established, especially where provision has been made for meeting the wants of older pupils, such as instruction in book-keeping, mechanical drawing, etc. The cost of evening schools is somewhat greater than that of day schools, but it should be remembered that *night work* in any business or trade costs more than similar work done in the day.

HIGH SCHOOLS.

There are now ten high schools established in as many different towns, besides two that are supported by tuition. Three of these have been lately established, and another town has erected a building for a high school and will soon have it in operation. This shows that the people are no longer content with a knowledge of the three "R's" simply, or even with the curriculum of the modern grammar school.

In addition to the direct benefits that arise from the establishment of a high school, there are some indirect advantages. As the teachers of a town are usually selected from its residents, by advancing the standard of education in a town there results the employment of more highly educated teachers. It establishes, too, a higher mark or degree of attainment to which pupils will aspire before finally quitting school.

The establishment and successful maintenance of a high school by the small town of Barrington, which has only five district schools to rely upon for its high-school pupils, shows that high schools might easily be established in many other places where they are not found, and where the children are deprived of all higher education.

PRIVATE SCHOOLS.

During the last few years many private schools have been established, and in some of the large manufacturing towns the enrolment of the private schools rivals that of the public schools. As to what is taught in them, how much and how well, it is difficult to say. The State board of education thinks that a list of studies should be prescribed for all schools in the State, both public and private, and that supervisors should be appointed to visit and report upon them.

FREE PUBLIC LIBRARIES.

There are now thirty-eight free libraries in the State, containing 144,269 volumes. It is estimated that eighty per cent. of the population are in reach of a library, and when a few more shall have been established the State will be able to claim the distinction which possibly no other can claim, that free schools and free libraries have been placed within the reach of the entire population. The public libraries serve the very important purpose of harmonizing and unifying the heterogeneous mass of people gathered into the State.

POLITICAL FUNCTION OF THE SCHOOLS.

One of the prime objects in the establishment of the public schools is the preservation of a republican form by government by educating the masses of the people and thereby enabling them fully to understand their rights and to maintain them. To assist in this, the pupils should be thoroughly instructed as to the American system of government, as to American statesmen, inventors, generals, and other celebrated men, so that, although their parents may continue to cherish the fondest affection for their native land, the children shall be fully imbued with the ideas and sentiments of this country.

SCIENCE AND INDUSTRIAL TRAINING.

The State board of education claims that industrial training must be given a place in the public schools, not that it should supplant anything, but that it should be made supplementary to the regular course. This kind of instruction is particularly needed now, since apprenticeships are no longer in vogue.

The State superintendent thinks that this want can be met to a large extent by giving instruction in the natural and physical sciences. "In the upper grades of our grammar schools and in the high schools, if physics were taught experimentally, the pupil would acquire from a thorough course in that study all that aptitude for handling tools, that acquaintance with the nature and uses of different kinds of materials, that opportunity for the development of whatever latent inventive genius there may be, which are claimed to be the real benefits to be secured from manual training."

Geology, mineralogy, botany, and zoölogy are already included in the course, and it is only necessary to modify the methods of instruction in them to meet, to a large extent, the demands for manual instruction.

RECOMMENDATIONS.

The State superintendent thinks that the time has come when the district system of conducting the schools should be abolished, and he cites a number of disadvantages arising from it: such as, placing the expenditure of a large amount of money in the hands of a scattered body of persons whose principal aim sometimes is "to use up the money;" frequently the poorest teacher of a town is paid more than the best; a school is sometimes closed for months because of the wilfulness of a trustee who can not secure the appointment of the teacher whom he desires, or because the school building is no longer fit for occupancy and the voters refuse to make the necessary improvements.

It is also recommended that a minimum standard of qualifications should be required of all teachers. At present no standard whatever is established, but it is left to each town committee to determine for itself what attainments shall be required. In some towns the teacher is required to be thoroughly qualified, while in others the committee is satisfied with recommendations and promises. It is not recommended that the State determine the degree of education exacted, but that it shall require that every teacher shall at least reach a minimum standard, leaving it to each town committee to say how much higher the standard shall be raised.

ARBOR DAY.

An act was passed by the Legislature in January, 1887, making such day as may be appointed by the Governor "Arbor Day" a holiday.

SOUTH CAROLINA.

[From Report for 1887-88 of State Superintendent James H. Rice.]

GENERAL CONDITION.

The report of the State superintendent for the year 1887-88 acquires additional interest from the fact that it is not founded alone upon reports made to him by the school commissioners of the different counties, but to a large extent upon his personal observation, as he visited during the year every county in the State, met with the teachers and trustees of many districts, and in many towns delivered addresses upon educational subjects.

The public free schools are meeting with more favor each succeeding year, and the people are manifesting their interest in them by their efforts in many ways to improve them. Large and comfortable school buildings have been erected in many towns and local taxes voted to supplement the regular school tax imposed by the State. It is claimed that during the last two years more money has been expended in the erection of good school buildings than in any similar period in the history of the State. Special mention is made of those erected in Greenville, Spartanburg, Winnsborough, and Rock Hill.

The enrolment of pupils shows a large increase; the total number being 193,434, an increase of 18,417 over that of the preceding year. The average attendance also shows a large increase, being 139,557; an increase of 14,036. It is unfortunate that these favorable statements should be offset to some extent by the unfavorable one that the average duration of the public schools was only three and six-tenths months. It should be remembered, however, that in many of the larger towns and prosperous districts the schools are continued for eight or ten months by local taxation or private subscriptions. The State superintendent recommends that the Legislature enact a general law allowing all school districts to levy a local tax to supplement the amount received from the general State fund.

TEXT-BOOKS.

The law requires the State board of examiners every five years to make a selection of text-books to be used in the public schools. Accordingly in September, 1888, the board met and

"Resolved, That the peculiar condition of affairs in this State, by reason of which not only in each county but in each school district there are teachers and pupils of different classes and races possessing different capacities to teach, learn, and purchase books, it would be injurious to educational interest to adopt a single list of text-books for the State."

"In order to secure flexibility in the system and to meet the varying wants of the schools, and at the same time to prevent frequent changes in text-books in a school, which impose vexatious and unnecessary expense upon parents," the board adopted several series of text-books, from which the county boards were allowed to select a single series for their respective counties. Any teacher refusing to use the books adopted forfeited his pay from the public school fund.

SCHOOL COMMISSIONER.

Much prejudice exists against the office of county school commissioner, which can be explained to a large extent by the perfunctory manner in which the officer discharges his duties and by his manifesting a zeal only in collecting his salary. It is thought, however, that to abolish the office would be a fatal mistake, but efforts should be made to increase the efficiency of the office. "The law requires this officer to examine every teacher, and yet it allows any man who can get the votes to fill the office, when, as a matter of

fact, he can not, in many instances, examine a single teacher. This is a blunder and worse than a crime." It is recommended that, after the selection by the voters, the man selected should be required to stand an examination before the State board of examiners, and if he fail to pass a satisfactory examination the office be filled by appointment. It is especially important that the office be filled by one thoroughly competent to superintend the schools of the county, as the people, on account of their poverty, are unable to send their children from home to be educated.

INDUSTRIAL TRAINING.

"There is quite a demand for industrial training schools. These must be built on special foundations or the experiments made by the schools of the larger towns. We can not add such features to our three months' free schools. It is greatly to be desired that private benevolence would furnish at least one model. Our boys and girls would fill such an institution, and soon they would be multiplied."

TENNESSEE.

[From Report for 1886-87 of State Superintendent Frank M. Smith.]

APPRECIATION OF THE PUBLIC SCHOOLS.

There is practically no opposition in the State to the public schools; but, on the contrary, the people appreciate fully the great advantages conferred by them, and are demanding that the school term be lengthened, and that the schools be improved in other ways. The county courts, too, are making more liberal appropriations in behalf of them.

SCHOOL DISTRICTS.

The schools' districts are identical with the civil districts; and, according to the law, no authorities except the county courts have the power to establish new districts; but, by a misunderstanding of the law, school directors have in many instances divided their districts into quite a number of smaller districts. As a consequence there are in some cases as many as two hundred districts where there should not be more than twenty. This tends to greatly weaken the efficiency of the schools, for instead of having two or three schools with several teachers and two or three hundred pupils properly graded into different classes, there are found a number of small schools struggling for a bare existence and in which all the grades are taught.

In order to prevent one school in a district from being overcrowded with pupils while the others have a very small number, the directors are authorized to say which school different pupils shall attend; but all the schools in a district must be maintained the same number of days, and when the public funds are not sufficient to keep up the schools for five months, the county courts shall either levy an additional tax for the purpose or submit the proposition to a vote of the people.

DIRECTORS.

One school director is elected annually on the first Thursday in August, to hold office for a term of three years. If a vacancy occurs at any time the remaining two directors appoint one to serve out the unexpired term.

TEXT-BOOKS.

Only the district directors have the power to adopt a series of text-books, but the directors of a county may meet together and adopt a common series, but their action shall not be binding on the directors of any district who wish to adopt different ones. County superintendents have no authority to adopt text-books for the county.

CONVENTION OF COUNTY SUPERINTENDENTS.

A convention of county superintendents was held in Nashville on the 6th of December, and proved to be a very interesting and important meeting. Subjects pertaining to the educational condition and improvements were considered, and such an interest was manifested in the proceedings that it was resolved to hold an annual meeting in Nashville on the second Tuesday of December, and that all school officers and teachers might become members.

NEW LEGISLATION.

Arbor Day established.—The Legislature, in March, 1887, made it the duty of the county superintendents to set apart annually some day in November as "Arbor Day," when the pupils of each school, under the supervision of the teacher, should set out trees around the school buildings and otherwise improve and beautify the appearance of the grounds,

so that the day should be one of enjoyment to the pupils, as well as of instruction in the importance of this subject.

[From Report for 1887-88 of State Superintendent Frank M. Smith.]

GENERAL STATEMENTS.

The growth of the public school system of Tennessee since 1873, when the present school laws went into effect, has been exceedingly gratifying; the enrolment and average attendance have nearly doubled, and the school-houses and school furniture are now far better. The length of the school term, however, is not much greater.

Teachers' institutes were held during the year in ninety of the ninety-six counties of the State, and were attended by four thousand three hundred and fifty teachers.

SCHOOL DISTRICTS.

Great injury has been done to the cause of education in some of the counties by the formation of a large number of school districts; in some counties there are eighty or ninety districts where there should only be eight or ten. In some of these districts the directors are utterly incompetent to discharge the duties efficiently. In most of the counties the school district and the civil district are identical, and in these counties we find the best schools. It is better to have a few schools attended by a large number of pupils than to have a large number of weak, struggling schools. In some cases the district directors have assumed the authority of forming new districts, an authority which belongs only to the county courts. The directors may determine what school in a district each child shall attend, but they have no authority to establish a new district.

COMMON-SCHOOL DIPLOMAS.

The State superintendent has had prepared a common-school diploma, a transcript of which is to be given each boy or girl who completes the course of studies required by law to be taught in the public schools; viz, orthography, reading, writing, arithmetic, English grammar, geography, United States history, elementary geography of Tennessee, and elementary principles of agriculture. This idea meets with general approbation, and it is thought that it will stimulate both teachers and pupils to more thorough and better work.

GRADED SCHOOLS.

In many counties graded schools have been established; and in the towns of Gallatin, Morristown, and Johnson City boards of education have been elected, corporation taxes imposed, and all the necessary arrangements made for running the schools ten months in the year. In Tracy City there is being erected a good school building, which when completed will be equal to any in the State.

COUNTY SUPERINTENDENTS.

In several counties of the State women were appointed by the county courts to serve as superintendents of schools. The State superintendent decided that according to the Constitution and laws of the State women are not eligible to the office, and in this decision he has been sustained by the attorney-general. The State superintendent called the attention of the county courts to this fact, and also as to the advisability of reappointing men who had shown themselves specially fitted to discharge the duties of county superintendents.

LOCAL TAXATION.

The law requires "that when the money derived from the school fund and taxes imposed by the State on the counties shall not be sufficient to keep up the public schools for five months in the year in the school districts of the county, the county court shall levy an additional tax sufficient for this purpose, or shall submit the proposition to a vote of the people." In several counties these additional taxes were levied. In Dyer County the court raised the tax from fifteen cents to twenty cents on a hundred dollars' worth of taxable property, and so satisfactory were the results that when it became necessary the next year to reduce the rate of taxation the reduction was made in county expenses and not in the school funds.

SCHOOL FUNDS.

The county trustees are required by law to keep the State and county funds entirely distinct, also to keep an account showing from what sources the funds are derived and to whom they are paid. They are also required to report to the county superintendent and to the district directors whenever any funds are received. These requirements are constantly disregarded.

Another evidence of the reckless management of the school funds is the want of correspondence in the balances left over June 30, the close of the fiscal year, and the amounts reported as on hand the next day, July 1.

The superintendent estimates that the schools lose each year at least one hundred thousand dollars by the non-collection of poll taxes which should be collected.

ASSOCIATION OF PUBLIC SCHOOL OFFICERS.

The association met at Nashville December 11, 1888. The session continued for four days, during which time many topics relating to the public schools were considered and plans for their improvement discussed. The superintendent thinks that this annual meeting of school officers will prove of great benefit to the schools, and in order to secure a full attendance of the county superintendents provision for defraying their expenses should be made by the county courts.

TEXAS.

[From Report for 1887-88 of State Superintendent Oscar H. Cooper.]

PUBLIC INSTRUCTION.

The obligation of the State to provide for the proper instruction of its youth in the elementary branches was recognized while Texas formed a part of Mexico, and it was one of the charges brought against that country by those who proclaimed its independence that Mexico had failed to establish a system of public instruction as required by its constitution and for which it possessed eminent resources. It was again recognized in the constitution of the Republic of Texas, and in the successive State constitutions of 1845, 1866, 1869, and 1876. The State now has a fine opportunity to establish one of the best educational systems of any State or Territory in the Union. The interest-bearing fund of the common schools and the State University is already \$20,000,000; the income from which is larger than that from the endowment funds of any other State, and there yet remain unsold thirty million acres of land which will greatly increase the school funds.

"It is the general impression, doubtless well founded, that better work has been done in the schools during the past two years than has ever been done before. This is due chiefly to the general progress of the State in intelligence and wealth, and to the increased interest everywhere manifested in the schools; but the establishment of a standard in the examination of teachers has contributed an important part toward this result."

.There are some defects, however, which mar the beauty of the system very much.

LENGTH OF TERM.

The average school term in the country schools is five months; in the town schools eight months. As these are the average lengths of the terms it follows that quite a number of the schools do not continue so long. All the schools of the State should be open at least six months, as required by the State constitution; but, as the increased income from land sales, leases, etc., will only be sufficient to meet the increase in population, it will be necessary to impose local taxes or to increase the State tax.

LOCAL TAXATION.

"It is the rule throughout the United States that the chief part of the fund used to support the schools of the district is levied, collected, and disbursed in the district. This system makes the people more watchful of the schools and accords closely with our notions of local autonomy."

It is left optional with each district whether it will try local taxes or not, and at present out of the three thousand school districts less than three hundred impose local taxes. It is not to be expected that many districts will vote the tax so long as the present law remains which requires a petition for an election by a certain number of land-holders, as in some parts of the State the number of the latter is quite small. A law should be passed abolishing the "community" system, as it is impossible to hold an election for local taxation where it is in vogue.

TEMPORARY DEFICIENCIES IN SCHOOL FUNDS.

"The most serious criticism made on our present school system is the uncertainty in the time of payment of teachers. Temporary deficiencies in funds to pay teachers are of common occurrence, and become pretty general during certain months of the year. This is the time when the balances carried over from the previous year have been generally exhausted and the collector of taxes has not begun to pay the local treasurers the school taxes collected for the year. The general explanation of these temporary defi-

ciencies is obvious: The schools are taught before the money to pay teachers' salaries has been collected. One way to remedy these deficiencies would be to postpone the opening of the schools for one year, from September to January 1. This should, however, be done only as a last resort, as it would be depriving the children of schools in order that money might accumulate in the State treasury. The other method would be to accumulate about \$500,000 in the treasury at the opening of the scholastic year."

This amount will be accumulated during the year if the overdue interest which has been increasing for more than ten years can be collected. Authority should also be given the State superintendent to withhold approval of requisitions for school moneys from cities and counties not then needing the funds.

SCHOOL-HOUSES.

The number of country schools in operation during the year 1887-88 was 8,826, while the number of school-houses belonging to the school authorities was only 3,286, the remaining schools being taught in church-buildings, barns, etc. "In many counties the value of the common jail exceeds that of all the school property in the county." If a school-house is built with public funds no additional money will be granted that community during the year to pay the salary of a teacher, and as the people are taxed for the benefit of schools they do not feel disposed to build a house at their own expense and then donate it to the public, especially as they may move to some other locality the next year and so get no further benefit from it. The average value of the country school-houses, with sites and furniture, is \$300, while the average value of those in cities is \$8,000. This great difference is explained by the fact that in cities the municipal authorities are allowed to issue bonds to obtain money to erect school-buildings, the bonds being paid gradually, while the county authorities are not permitted to raise money in the same way. It is thought that this authority should be granted the county authorities, as it would also serve as a safe investment for the permanent school fund, would enhance the value of property, and would attract desirable immigrants to the State.

TEACHERS.

The State should provide for a uniform standard for teachers' qualifications by requiring the questions for the examinations to be prepared by the State superintendent. The requirement of written examinations and that boards of examiners shall report under oath has already served to elevate considerably the grade of teachers. As the real success of a teacher can only be determined in the school-room, licenses should at first be only probationary, and, after some experience, might be granted for longer terms, and those persons who show eminent ability and skill should be granted licenses for life.

COUNTY SUPERINTENDENTS.

During the last two years the experiment has been made in several counties of having all the schools of a county placed under one superintendent, and it has proved highly satisfactory in every respect. The school term was usually lengthened, although the amount of funds per capita was less, and the quality of work done was much better. Supervision by the county judges was an entire failure, as not more than one-fourth of the schools were visited by them, and the State superintendent could not thoroughly instruct the thirty thousand trustees as to the school work. "I am clearly of the opinion that it will be found to be wise economy to provide county superintendency in all the organized counties of the State. The quality of the work required of the schools will be greatly improved in most counties, and the school fund will be more effectively used."

TEXT-BOOKS.

The State superintendent issued a circular to the school trustees that it was their duty to adopt a series of text-books for their respective districts and to prohibit the use of others. In some of the counties the trustees held a joint meeting and adopted a uniform system for the whole county. In this way parents can be saved the heavy expense incurred by every change of teacher or residence, and the teacher will be saved a great deal of unnecessary labor. State uniformity of text-books would be better still, if it can be adopted without risk of corruption in the selection of books and the centralization of too much power in the hands of a few. While it would not be advisable to adopt free text-books for the country schools on account of the impossibility of securing proper care in the use of them, it would certainly prove satisfactory in the cities and larger towns.

SCHOOL DISTRICTS.

The plan of having separate districts for each school proves liable to the same objections as the community system, and it is recommended that districts be made large

enough to include quite a number of schools—five to fifteen—the boundaries being determined somewhat by surrounding conditions, creeks, rivers, good roads, etc.

CLASSIFICATION OF SCHOOLS.

The school law requires instruction to be given in the ordinary branches, and such studies as the trustees or State superintendent may direct. This authority is often used by the trustees to the great detriment of the schools, when they allow two or three pupils to be taught in the higher branches and to consume as much time as any large class of the thirty or forty pupils. To avoid this difficulty the schools should be divided into primary, intermediate, and high schools. In the primary schools should be taught spelling, reading, writing, primary arithmetic, history, geography, etc. In the intermediate, these studies should be carried further, so that the pupils could enter the high schools; and in the high schools should be taught such branches as are necessary to admit students to the State university and normal schools, and to enter the ordinary vocations, the course being limited to three years. The great majority of the schools should be of the first kind, one high school to a county being sufficient.

UTAH.

[From Report for 1885-86 and 1886-87 of Commissioner of Schools P. L. Williams.]

PUBLIC SCHOOLS OF UTAH NOT FREE.

The most striking feature connected with the public school system of Utah is that it is not a free-school system. Tuition fees are charged in every county of the Territory, and a little more than one-third of the total amount raised for schools was from this source. By section 3 of the "Act for the establishment and support of district schools," it is left optional with the district trustees whether or not they shall charge tuition fees and they are authorized to prescribe the rate of tuition. As a matter of fact the trustees heretofore have seen fit to charge tuition, and consequently the schools have not been free. Every other State and Territory in the Union has a free-school system, and it is urged by Commissioner of Schools Williams that Utah also place herself abreast of them in the cause of education.

COUNTY SUPERINTENDENTS.

"It is made the duty of the county superintendents to visit the schools at least twice in each year, to examine the trustees' records, audit their accounts, and see that they properly discharge their duties. In many counties of the Territory, where the population is large and there are many districts, this imposes a heavy burden upon the county superintendents; yet it is necessary that this duty should be faithfully performed in order to secure a steady improvement in the schools, and to obtain satisfactory results in the accounts and reports of the trustees." The law provides no compensation whatever for their services, and the only pay they have received has been a very meagre sum allowed them by the county courts. The county superintendents are usually men of small means and can not afford to take time from their regular work to look after the interests of the schools without receiving adequate compensation therefor.

NEW TEXT-BOOKS ADOPTED.

As there was considerable dissatisfaction with the books used in the public schools, and as all of them, with the exception of the readers and spellers, had been in use for five years, the time required by law before a change could be made, the commissioner of schools called a convention to adopt a new series. The convention met in June, and after full discussion adopted a new list and secured very satisfactory terms for their exchange and introduction. The books adopted were found to give very general satisfaction.

INADEQUATE SCHOOL ACCOMMODATIONS.

Although only about fifty per cent. of the school population are reported as attending school, yet the school rooms were often overcrowded with pupils, causing great discomfort and in some cases even endangering the health of the pupils. This was generally true throughout the Territory, but particularly so in Salt Lake City and County, where the commissioner of schools thinks the accommodations are sufficient for only one-third of the school population. Many districts in Salt Lake City do not own a single building, but the basements of ward meeting houses or other such rooms are used for school purposes.

REMEDY PROPOSED.

Heretofore buildings have been constructed to meet immediate necessities, and in a few years, when the population had increased, additions have been made to them. Consequently the districts now have buildings without that symmetry, unity of design, and convenience in arrangement which they should possess. It is recommended by the commissioner of schools that large and commodious buildings be erected which would not only serve present purposes but be sufficient to meet future demands. As this, however, would necessitate the immediate outlay of a large amount of money, more than could be raised in two or three years by reasonable taxation, it is recommended that districts be authorized to obtain the necessary means by issuing bonds which could be redeemed by gradual taxation.

POLYGAMY COUNTENANCED IN THE SCHOOLS.

It is stated that while there has been no affirmative teaching of polygamy in the public schools there have been many evidences of a respectful silence with reference to violations of the law against it. The commissioner says: "Perhaps the tendencies to which I refer cannot be better described or defined than by the statement made to me within the last few months by the president of the University of Deseret, that if in the course of instruction imparted in that institution generally or to the classes in civil government (where perhaps it would be most naturally presented), it should be inculcated that good citizenship exacted obedience to those laws enacted by Congress against the polygamous condition and kindred vices of Utah, it would break up the school."

PRIVATE SCHOOLS.

In Salt Lake City and other large towns of the Territory there are quite a number of private or denominational schools, which are very largely attended and which are becoming more popular and more generally patronized every year. Many of these schools are superior to the public schools. Their establishment is likely due in great part to the tuition fees charged in the public schools; the parents preferring, if they have to pay tuition, to maintain a school exclusively under their control and where they can teach any religious belief they desire. While their establishment cannot be said to injure directly the public schools, yet unless the people patronize the public schools they will not give them that earnest and active support which can be manifested in so many ways other than by the payment of school taxes, and these will be regarded as a burden only to be tolerated as a kind of public necessity.

NEW LEGISLATION.

The office of Territorial superintendent of district schools abolished.—The Forty-ninth Congress in 1887 adopted the following act: "That the office of Territorial superintendent of district schools created by the laws of Utah is hereby abolished; and it shall be the duty of the Supreme Court of said Territory to appoint a commissioner of schools, who shall possess and exercise all the powers and duties heretofore imposed by the laws of said Territory upon the Territorial superintendent of district schools, and who shall receive the same salary and compensation, which shall be paid out of the treasury of said Territory; and the laws of the Territory of Utah providing for the method of election and appointment of such Territorial superintendent of district schools are hereby suspended until the further action of Congress shall be had in respect thereto."

The commissioner of schools, in addition to the regular statistics, must state the "number of teachers who are Mormons, the number who are so-called Gentiles, the number of children of Mormon parents and the number of children of so-called Gentile parents, and their respective average attendance at school."

Instruction in physiology and hygiene.—Instruction as to the nature of alcoholic drinks and narcotics, and their effects upon the human system, is required in Utah, as in all the other Territories and the District of Columbia, by the act of Congress approved May 20, 1883. It is required, also, that teachers shall pass a satisfactory examination as to the effects of alcoholic drinks and stimulants upon the human system before receiving a certificate to teach.

Graded schools may be established.—"The trustees of any school district having a population of over twelve hundred, when authorized by a majority vote of the property taxpayers resident in the district present at a meeting called for that purpose, may establish and maintain a graded school, or a graded department in a school in such district, in which pupils may be instructed in higher branches of education than those usually taught in common schools, and pupils over 18 years of age may be admitted to and instructed in such school or department, on such terms as to tuition and otherwise as the trustees may prescribe." The trustees may collect a tax of one-fourth of one per cent. without calling a meeting for that purpose.

Slight changes in the former law.—The school census is now required to be taken on or before the second Monday in July in each year, instead of in June as formerly, and reports are to be made to the county superintendents by the 10th of August.

Certificates are no longer granted to graduates of the University of Deseret without their having passed an examination.

The property of non-residents, formerly exempt from taxation for the payment of teachers, is now taxable for such purpose.

The county assessors and collectors are made the assessors and collectors for school taxes, and all school taxes become a lien on the property assessed from the date of assessment, and are collected as the Territorial and county taxes.

[From the Report of the Commissioner of Schools to Congress in 1838.]

MAINTENANCE OF SCHOOLS.

The amount of funds collected by the three-mill tax imposed by the law of 1878 is scarcely sufficient to pay one-half of the salaries of the teachers employed, consequently it has been necessary and customary to charge tuition fees at such rates as the trustees may think necessary. In about eight or nine districts local district taxes have been levied in order to supplement the Territorial fund and thereby furnish free schools to all classes. The schools are not required to be kept up for any definite period, and there is no provision for withholding Territorial funds from districts making no provision for schools, and as no one can attend school without paying the tuition fees, many children of indigent parents are deprived of all means of acquiring an education.

ACTION OF THE LEGISLATURE.

At the twenty-eighth session of the Legislature, a bill was prepared and passed the lower house making provision for the establishment of schools on about the same plans as are found in most of the States, but in the legislative council a substitute was offered and finally passed both houses imposing a tax of eight mills on the dollar, the funds arising from which were to be distributed to the district and *private* schools in proportion to the attendance, the private schools not being subject to any public supervision or control whatever. This bill met with very little opposition, except from the non-Mormon members, but, as was expected, it received the executive veto and consequently the schools have no greater amount of funds than formerly.

SCHOOL ATTENDANCE.

The tables show that only 18 per cent. of the children of non-Mormon parents, and 40 per cent. of the Mormon children, making 58 per cent. of the school population, attended the district schools. This is to be attributed to a lack of public interest in the schools, the establishment of private schools, defective legislation, and charges for tuition. For somewhat similar reasons a sufficient number of school-houses has never been provided, and although the attendance at district schools has never been so large as should be expected, there has been a great lack of comfortable accommodations for those who did attend; and it is probable that if good school-houses were provided there would be much better attendance notwithstanding the other unfavorable conditions.

PRIVATE MORMON SCHOOLS.

There has been great interest manifested lately in the establishment of private schools by members of the Mormon Church in which instruction could be given in the religious beliefs of the denomination. Efforts have been made by the leaders of the Mormon Church to secure funds for this purpose, as they are anxious to establish one or more private schools in each "stake," the stakes generally corresponding in territory to the several counties. This movement has received the earnest support of Wilford Woodruff, who is chairman of the church board of extension and also president of the Mormon Church.

VERMONT.

[From Report for 1836-37 and 1837-38 of State Superintendent Justus Dartt.]

GENERAL CONDITION.

The enrolment for the two school years was smaller than it had been for ten years, but the average attendance was greater than for the three previous years; consequently it would seem that the pupils had been more regular in their attendance, but the State superintendent complains of great irregularity in attendance still. The average duration of schools for the two years 1836-37 and 1837-38 was one hundred and thirty-nine and one hundred and thirty-seven days respectively, but the average number of days' attendance of each pupil enrolled was only eighty-eight for the first year and ninety-

two for the second—showing a loss of more than one-third of the time the schools were in session. As a census of the school population is not taken annually, it is impossible to ascertain the number of children not attending school. Although there is a law for compulsory attendance, it seems to have fallen into innocuous desuetude.

GRADED AND HIGH SCHOOLS.

The total number of these in the State is forty-seven, and during the year 1887-88 there were 14,647 pupils attending them. These schools are the most prosperous ones in the State and are making great improvements. The salaries of the principals range from \$700 to \$2,500, which is much more than that received by teachers in ungraded schools. About four-fifths of the children can not attend the graded schools, however, but must receive all their education in the ungraded country schools, which are poorly supplied with charts, globes, blackboards, etc., and where the teachers are frequently poorly qualified to discharge their duties, and perhaps have only taught a year or two, as is shown by the recommendation of town superintendents that no person under eighteen years of age be permitted to teach in the public schools.

TEMPERANCE INSTRUCTION.

The Legislature in 1886 passed a law requiring all the pupils in all the public schools to be taught physiology and hygiene with reference especially to their effects upon the system, and that the books on this subject should be furnished the pupils at the expense of the State. A committee appointed by the Governor to select such books decided upon the following:

- (1) Child's Health Primer, known as Pathfinder No. 1; (2) Hygiene for Young People, known as Pathfinder No. 2; (3) Lessons on the Human Body, by Orestes M. Brands; (4) Hygienic Physiology, by Prof. J. D. Steele.

Each town superintendent in the month of January annually makes an estimate of the number of books of each kind which will be needed in his town and notifies the secretary of state, who has them forwarded to him. If pupils wantonly destroy or injure the books, the town superintendent shall take steps to collect damages for the same.

The number of such books furnished from January 1, 1887, to May 31, 1888, one year and five months, was 75,779; and the cost to the State was \$25,554.48.

A very considerable difference of opinion is manifested as to the advisability of the measure adopted; the State superintendent regarding the length of time the pupils are required to devote to the subject as unreasonable, some town superintendents that the study should be optional, others regarding the measure as the hardest blow ever given the common schools, while others state that both pupils and parents have been very much interested in it, and that it will prove of great value.

Such diversity of opinion is to be attributed in great part to different interpretations of the law; some holding that the pupils are required to devote one-fourth the time of their whole school life to the subject, while others think they have complied with the law when they have used the books as supplementary readers.

FREE TEXT-BOOKS.

Superintendent Dartt again urges the adoption of the free text-book system, which he states has been in operation in Philadelphia nearly seventy years, in New York City more than fifty years, and in Newark, Jersey City, Paterson, and New Brunswick, in New Jersey, for many years, and has now been adopted in many other places.

Some of the objections urged against it are that it increases taxation, that the ownership of books by the pupils cultivates in them independence and self-reliance, that the school-books are convenient for study and reference after one's school days are ended, and in many cases are the only books in the child's home.

But it is claimed that while it increases taxes, it is a legitimate tax; that since the State requires the use of certain books, it necessarily follows that the books should be free; that the system of free text-books is no longer an experiment, but has given general satisfaction; that it effects a saving of time and expense, secures uniformity of text-books and better books, a better classification of pupils, cultivates in pupils respect for public property, increases school attendance, and removes caste distinctions.

Many of the town superintendents also urge free text-books.

TOWN SYSTEM.

The town system of management of public schools, or township system as it is called throughout the West and South, prevails in twenty-six towns, while sixteen towns tried it, but after a year or two abandoned it. It is very strongly advocated by the State superintendent of public instruction, many of the town superintendents, and by the teachers generally.

At a meeting of the American Institute of Instruction it was—

"Resolved, That we commend the adoption of the town system in the administration of schools, as now sanctioned by the successful experience of all the States foremost in education."

Superintendent Dartt recommends that the system be adopted by the State as a whole and not by individual towns.

SUPERVISION.

The schools of each town are supervised by a town superintendent instead of a county superintendent, as we find in so many of the States. The State superintendent recommends that the local management of the schools be by a board of directors elected by the town; but quite a number of the town superintendents advise that the schools be placed under the direction of a county superintendent, who should be required to devote his whole time to the work.

RECOMMENDATIONS.

Superintendent Dartt makes the following recommendations:

- (1) That a census of the school population be taken annually.
- (2) That school taxes be equal throughout the State.
- (3) That the school taxes of each town, together with the income of all other town school funds, constitute the school money of such town.
- (4) That the district system be abolished in the whole State, and that the schools be in charge of a board of directors elected by the town.
- (5) That small schools be consolidated, and none be sustained with less than ten scholars.
- (6) That provision be made for the transportation of all children who could not otherwise attend.
- (7) That all children of good health and of suitable age be required to attend school for at least twenty weeks each year.
- (8) That all text-books be furnished free by the towns.
- (9) That the school year be made to end with the 30th of June instead of March 31.

VIRGINIA.

For information contained in this Report relating to education in Virginia consult the Index. If the State School Report is received in season an abstract of it will be given at the close of this volume.

WASHINGTON TERRITORY.

[From the Governor's Report to the Secretary of the Interior for 1887-88.]

The total population of the Territory in 1886-87 was 143,669, and in 1887-88 it was estimated to be 167,982. The school population in 1886-87 was given by the State superintendent of education as 18,506, and if it has increased in the same proportion as the total population it is now more than 21,000. The Governor says: "The excellent character of our statutes on the subject of public schools and the liberality of our people in levying taxes for public education of our youth was shown in a very striking manner, in my report for 1887, and the Territory has not varied its record in those respects during the past year."

"During the summer and autumn of 1887 I visited every prominent locality and all but two of the counties of the Territory in order to become personally acquainted with its topography, resources, and condition. Amongst the noticeable features of the landscape everywhere was the white school-house. They confront you not only in the cities, but in the villages and hamlets and beside the country roads. The people take pride in them and keep them in good shape. I visited the public schools in many places and was struck with the healthful appearance and physical beauty of the children. That they were true Americans was demonstrated by the fact that they demanded a speech every time; in one case, at Walla Walla, refusing to excuse me even when the bell rang for recess and their companions from the other rooms went clattering along the halls."

"The class of teachers in the public schools, with whom I had opportunities of conversing, seemed to be, with few exceptions, men and women of high aims."

There are, in different parts of the Territory, quite a number of private schools, academies, and colleges that are assisting very much in promoting education, and are meeting with much success.

SCHOOL LANDS.

"There have been no disclosures on the subject of school lands since my last report, except the passage of an act by Congress authorizing boards of county commissioners to

lease them to individuals on certain conditions. This will increase the revenues available for school purposes by the amount of the rents derived at once, and the improvements that will be made will in all probability add to the value of the lands and increase the amount that will ultimately be realized from their sale."

ARBOR DAY.

There is much land in the Territory that is not suitable for agricultural purposes, but could well be used for a growth of forests. In order to give encouragement to tree planting the Governor urged the Legislature to establish an "Arbor Day" to the schools, but the matter was overlooked. So great an interest in it is now being taken, however, that it is very likely that the next Legislature will pass a law upon the subject.

WEST VIRGINIA.

[From Report for 1886-87 and 1887-88 of State Superintendent Benjamin S. Morgan.]

TEACHERS' SALARIES.

The failure of the teachers to receive prompt payment of their salaries is a cause of much complaint. In many cases they are required to wait months before being paid or to discount their claims very heavily, or else enter suit before a justice or circuit court, which is an unpleasant recourse, especially so for lady teachers. In case of other orders on the county treasurer which can not be paid, the sheriff is required to indorse them, and if they are due at the date of presentment they draw the legal rate of interest from that time. This is not done, however, in case of teachers' orders on the county treasurer, which is manifestly unfair treatment. In order to secure and retain teachers fully qualified for their work, they should be assured that their salaries shall be regularly and promptly paid, for even then they are not fully compensated for the work done.

GRADED COURSES FOR COUNTRY SCHOOLS.

The present school law simply requires that certain branches shall be taught in the public schools, without giving any classification of the studies, or stating how long each shall be studied. Hence, with every change of teachers, and at the beginning of every term, a new arrangement of classes is made without regard to any definite course of progression. The superintendent recommends that the State board of education, under the direction of the State superintendent, be required to prepare a manual and graded course of study for ungraded schools, to be printed and distributed for the education department. "Such a course of study, partaking somewhat of the character of a manual, would serve a valuable purpose as a guide to the teacher, and especially to the young teacher; it will encourage the pupil by preventing a great deal of useless repetition, and aid in securing more regular attendance; it will aid the county superintendent in the work of supervision, and bring his influence more directly in connection with each school, and therefore make his work more effective; it will give the ungraded schools a higher and closer organization, and therefore give the entire system greater strength."

An experiment of this kind was tried in Monongalia County as early as 1876, with very gratifying results, and since then it has been adopted in many other counties of the State, as well as in many States of the Union.

COUNTY SUPERINTENDENCY.

It is not sufficient for the State to levy and collect a school-tax, build a school-house, and employ a teacher, but it should also have some one to superintend and direct the work of the teachers, see that it is properly done, suggest improvements, and aid in securing a proper classification of pupils. Every city has its superintendent of schools, although in cities the schools are generally graded and have better teachers than the country schools, and therefore do not stand in such great need of supervision; but so advantageous has it proved to be, that under no circumstances would the cities dispense with the school superintendent. In the ungraded country schools we find the pupils badly classified, no well-defined course which they are expected to pursue, and the teachers very frequently incompetent, and, in addition, the teachers are frequently engaged in the work for the first time; for it is estimated that fully 20 per cent. of the teachers employed each year have had no experience. A large portion of those who enter the work do so because it is the most remunerative employment they can secure just at the time, and are only waiting to receive a better offer, when they are glad to accept it. It is for these reasons that the country schools stand in such need of a county superintendent. During the time the county schools are in session the superintendent should be required to devote his entire time to them and to teachers' institutes, and in the summer when the schools are not in session he should hold county institutes. In order that

he might have sufficient time to fully acquaint himself with his new work and to inaugurate and carry through any reforms found necessary, he should be chosen for a term of four years instead of two. It is frequently said in objection to this that if a county superintendent proves worthy the people will re-elect him, but this is not corroborated in the practical working of the office, for it is too often found that the superintendent is displaced simply for discharging fully his duties. The officer should live at the county seat, and should be paid a liberal salary; enough to secure the best teacher in the county.

HIGH SCHOOLS.

The educational institutions of the State are subdistrict schools, graded schools, high schools, normal schools, and the State University; they should be so arranged as to meet the interdependence that should exist between them. The common and graded schools must look to the normal schools and State University for their teachers, and the high and normal schools must depend upon the ungraded schools for their students, and the State University looks to the graded and high schools for its students. The course in these different schools should be arranged to suit each other, and not left to the gradual changes of years.

The high schools so far, however, have entirely failed to accomplish their purpose, and in addition have destroyed the old academies which they were intended to supersede. They are not only too few in number, but their course of instruction is too low and their work inferior. Hence there is a break in the connection between the subdistrict schools and the State University. The law as existing for the last twenty years has allowed the establishment of district and joint district high schools, but there is not a single district high school in the State. Experience shows that the high school district should be larger than the graded school district, and in most cases it should be coterminous with the counties. The ordinary school districts do not furnish a sufficient number of well-advanced pupils to support a good high school, and for this reason the high school district should be larger. The second essential to the establishment of good high schools is State aid. In many of the States this aid has been given, and it has proved to be a wise step. There will at first be some opposition to the schools, but when they get in regular operation and their good effects begin to be seen they will be highly appreciated.

TEXT-BOOKS.

The present contract for furnishing school books expires in 1890, but the superintendent, after examining a number of different plans in other States, thinks none better than the one now in operation in the State, and as the text-books now in use give very general satisfaction, no change in this respect should be made. It is recommended, however, that provision be made by law for furnishing text-books free of expense to all indigent pupils. Some of the States have gone further, and furnished free text-books to all the pupils, and the law gives general satisfaction. As a result, there is a larger and more regular attendance, better classification, and no waste of time at the opening of the term, and less expense.

PHYSIOLOGY AND HYGIENE.

The requirement of the law that physiology and hygiene be taught in the public schools, with special reference to the effects of narcotics and alcoholic stimulants upon the human system, meets the general approbation of teachers and patrons. The law has not been obeyed entirely, however, as no text-book on the subject was chosen, and teachers were not required to be examined on the subject until after January, 1889, which gave the impression to many that the study was not to be introduced till after that time.

SCHOOL LIBRARIES.

The importance of establishing libraries in connection with the public schools is beginning to be very generally recognized. They serve to protect the children to some extent from the evil influences of the pernicious literature which is now so generally circulated and which is made so seductive to youthful minds; moreover, the public school libraries cultivate in the young a desire to read, and under the wise guidance of a discreet teacher a desire for good literature is implanted, in the gratification of which much historical and biographical knowledge may be obtained.

COMPULSORY ATTENDANCE.

The sentiment in favor of a compulsory attendance of all pupils upon either public or private schools is becoming stronger each year and has been attempted in several States with varying degrees of success.

MANUAL TRAINING.

The subject of manual training in the public schools or in schools established specially for this purpose is now receiving much attention. While other States are making great advances in educational matters it does not become West Virginia to be lagging in the rear, and so it is advisable that a committee be appointed to investigate the subject of industrial education, as to whether it should be ingrafted upon the public school system or separate schools be established for the purpose.

RECOMMENDATIONS.

The following recommendations are made by the superintendent: That the employment of children under a certain age in factories, mills, or mines during the time the schools are in session be prohibited.

That boards of education be authorized to provide books and stationery for indigent pupils.

That the four years' certificates of teachers be renewable after the expiration of three years.

That the State board of education be authorized to establish a graded course of study for ungraded schools.

WISCONSIN.

[From Report for 1886-87 and 1887-88 of State Superintendent Jesse B. Thayer.]

SCHOOL ATTENDANCE.

The statistics of the year 1886-87 presented some remarkable and unexpected features, as they showed a decrease in all the items concerning which statistics were collected; even a decrease in the number of children of school age in the State, while it is well known that the population of the State has been rapidly increasing. This apparent decrease in the school population is very likely due to the system of joint school districts, the clerks of different districts being required to report the facts relating to schools to the town clerks, and it is very probable that many duplications were made. The law recently passed requiring the clerks when taking the census to take the name and age of each person, and with whom the same resides, very probably was the means of preventing many persons from being reported twice. The statistics of the cities did not show any decrease, but only the rural districts.

The attendance at school was smaller than in the previous year, and was occasioned to a large extent by the deep snows and stormy weather of the winter of 1886-87. In many instances the trustees were compelled to close the schools for one or two months, thus shortening the school term to that extent.

It is thought, too, that a larger number of children than usual attended private and parochial schools; but as no reports from these are made, although the law requires all chartered institutions to do so, it was impossible to ascertain the exact number of children attending them. Superintendent Thayer thinks that all such schools should be required to report at least the number of children attending them.

After all due allowance, however, has been made for these causes, the fact remains that the number of children attending the schools, and the number of days the schools were in operation, were much below what might reasonably be expected; and it should be ascertained whether this is due to anything connected with the schools, and, if so, in what way it might be corrected. In all the States there is a large number of children who do not attend school, and this should especially be expected in a new State like Wisconsin, where the people are constantly pushing farther out into the unoccupied lands where there are no schools, and even if there were the amount of work to be done in preparing land for cultivation, in building houses, etc., would be so great that little opportunity could be afforded children to attend school.

TOWNSHIP DISTRICTS.

Superintendent Thayer thinks that it should be considered whether the schools are not failing to accomplish what should be expected of them on account of their adhering to the old district system, a system which may have served a useful purpose in its time, but which is now being abandoned in many States, and in others the propriety of doing so is being considered. The district system requires the appointment of about eighteen thousand men in the State to attend to school affairs, and it is very probable that if fewer such officers were needed better men would be found, and the schools would soon begin to improve in many respects. The appointment of intelligent men who were interested in the success and prosperity of the schools would prove highly advantageous to them.

COURSE OF STUDY FOR UNGRADED SCHOOLS.

Much attention was given to the subject of establishing a regular course of study for ungraded schools, and so far as adopted it proved of great advantage in securing systematic and progressive work; and the desire of children to complete the course and to be able to stand a successful examination before the county superintendent, and to receive a certificate thereof, proved a valuable incentive to study. It is thought, too, that the adoption of such a course would be of great assistance to young teachers, as it would be a valuable guide to them in outlining the work to be accomplished.

TEACHERS.

The great majority of applications for teachers' certificates made and granted are for those of the lowest grade; of the 8,826 certificates granted during the past year only 435 were of the first grade and 1,058 of the second grade, and in the previous year still fewer first and second-grade certificates were issued. It is thought that the law of 1887, giving greater value to first and second-grade certificates, will induce teachers to make greater efforts to obtain them.

The requirement of the law that teachers shall pass a satisfactory examination in physiology and hygiene, and other studies, did not diminish the number of teachers receiving licenses, for the persons wishing to receive teachers' certificates at once began to qualify themselves in these branches. Superintendent Thayer thinks that some other studies should be added to the list required, namely, botany, elementary physics, and that branch of physiology which treats of animal life generally, and the laws of growth and health of domestic animals. It is thought that by including these in the common-school curriculum, the instruction would be of a more practical character, and thereby be of greater interest to the pupils.

HIGH SCHOOLS.

A larger number of free high schools is reported than heretofore, and there is a larger attendance upon them. Their establishment has not interfered at all with the graded schools, and the appreciation of them is increasing. It is to be regretted that a larger number of towns, where there are no graded schools, have not availed themselves of the aid offered by the State for the establishment of high schools.

SCHOOL EXHIBIT.

The Legislature appropriated two thousand dollars for the purpose of making an exhibit of the work and condition of the public schools of Wisconsin at the National Centenary School Exposition held in Chicago, in July, 1887, in connection with the annual meeting of the National Educational Association. An extensive, well-arranged, and creditable exhibit was made of work of the public schools, normal schools, and State institutions, and at the close of the exposition at Chicago, the material was shipped to Milwaukee, where it was exhibited during the months of September and October, and afterwards returned to the contributors.

LIBRARIES FOR SCHOOLS.

Not much has yet been done towards establishing libraries under the recently enacted law, about thirty per cent. of the towns of the State having taken some steps in this direction. Some defects have been encountered in the administration of the law, but they may be easily remedied.

WYOMING.

[From Report of the Governor to the Secretary of the Interior, September 19, 1888.]

"The public schools in Wyoming are well attended considering all things, and are an honor and credit to the Territory. The superintendents, principals, and teachers are earnestly devoted to their work, and will compare favorably with those of any State or Territory." The leasing of the school lands can be made to yield a large fund for schools, and relieve the tax-payers of much of their public burden.

CHAPTER V.

DISCUSSIONS OF EDUCATIONAL QUESTIONS, CHIEFLY BY STATE SUPERINTENDENTS.

ADMINISTRATION—Arbor Day—Compulsory Attendance—Discipline—Education—Evening Schools—Graded Schools—High Schools—Hygiene—Irregular Attendance—Language of the Public Schools—Libraries for Schools—Manual Training—Moral Training—National Aid—Private Schools—Prizes—Public Schools—Revenue—School-Houses—Supervision—Teachers—Temperance Instruction—Text-Books—What shall be Taught in the Public Schools—Word Method of Teaching Reading.

I.—ADMINISTRATION.

Township districts adopted in Indiana.—Superintendent Holcombe, of Indiana: At first every school district was independent, with a school board of its own. This plan was found to be ineffective, wasteful, and extravagant. All the districts of a township were, therefore, united into a school corporation under a single responsible trustee. This was a great step in advance. Order began to prevail and some life appeared in the schools.

Township districts favored in Missouri.—Superintendent Coleman, of Missouri: I greatly favor the township as the unit for the district. We have too many districts and, therefore, too many school boards. One board in a township, and a township tax to maintain the schools, would greatly simplify our system, giving more uniformity to the schools, length of term, and efficiency of school work and discipline.

Give satisfaction in Rhode Island.—Superintendent Stockwell, of Rhode Island: So far as the towns have changed (to the township plan), the people are thoroughly satisfied that they get better schools for less money. I do not believe that there is a single advantage to be secured by the so-called district system as a system.

What would be secured.—Superintendent Thayer, of Wisconsin: I am most cordially in favor of an obligatory township system of school government. I am of the opinion that:

- (a) It would greatly equalize the cost of public schools.
- (b) It would almost entirely remedy the evil of inconvenience to school-houses by permitting every child to attend where most convenient.
- (c) It would do away very largely with the controversies over boundaries of school districts and the location of school-house sites.
- (d) It would secure better school-houses and better appointments.
- (e) It would secure better teachers by diminishing the opportunity for the prevalence of unworthy motives; would make it easier to secure uniformity and free supply of text-books; would promote the efficiency of the township system of libraries; would promote some measure of local supervision; would insure the adoption of a course of study in ungraded schools.

(f) It would especially be useful in the way of such disposition of the available teaching force in the town that the greatest utility would result. The "misfits" of teachers and districts are a large factor in the failure of schools.

Some of the advantages.—Superintendent Hine, of Connecticut: The township system has the following advantages:

- (a) Greater efficiency of management.
- (b) Because the system is co-ordinate and not dislocated.
- (c) More public interest in schools, because the matter is of greater importance.
- (d) There results always more schooling for the children.
- (e) Equality of advantages, continuation of teachers in more places.
- (f) A course of study pursued continuously to the end.
- (g) Better buildings and material.

Better men could be secured as directors.—Superintendent Smith, of Tennessee: The township district is decidedly the plan for Tennessee. I favor the township plan because we have several object-lessons in Tennessee that speak louder than words. The

fewer men you have to manage the schools, the better. We can secure good directors on the township plan with but little trouble; the other plan gives much trouble.

Gives satisfaction in Alabama.—Superintendent Palmer, of Alabama: By our fundamental law every township is a school district and a body corporate, and there has been no disposition to change it, and the system gives satisfaction.

Advantages of.—Superintendent Thompson, of Arkansas: In the township a larger number of voters would give a more general expression of the popular will, and more interest would be manifested in selecting good men for school directors. The township as the school district would do away with the necessity of transferring from one district to another; the schools would be as convenient as they are under the present system, the people would retain the same absolute control over the schools, and equal privileges be secured to all. At present, locality determines the length of the school term and other privileges; for instance, one district has a school for eight or nine months, with a comfortable house and excellent teacher, and in the same neighborhood, in another district, though the number of children is greater, there is only a three months' term.

How it works in New Hampshire.—Superintendent Patterson, of New Hampshire: It will no longer be possible for a rich district, by squandering surplus funds on a few pupils, to deprive all the other scholars in town of a portion of their legitimate schooling. It will no longer be possible for the village child, unless under special act, to secure thirty or forty weeks of schooling, while the boy or girl on the farm gets but ten or fifteen because he happens to live in a poor district. It will no longer be possible to limit a heavy tax-payer in a poor district to half the schooling of a non-taxpayer in a rich one. The law makes the town as at first the political unit of the State, and is in the interest of equality and fair play.

No law ever encountered at the outset, greater or more groundless prejudices than this, and none ever disarmed opposition more quickly, and demonstrated its power to benefit the State. Though the sum paid teachers is \$10,328 less than last year, the average length of school has been two weeks more. There has been a more equitable distribution of educational opportunities than formerly, and, as a rule, better teachers have been employed.

* * * * *

The reports from the school boards generally indicate that the new law is settling down into an efficient and orderly system, and that the people, as they become accustomed to it and recognize its power to eliminate chronic evils and vitalize the schools, are disposed to cherish and maintain it.

In favor of it.—Superintendent Draper, of New York: I am myself inclined to favor the proposition, in the belief that it would result in securing a better class of men for trustees in the rural districts, and that the levying of a tax upon the entire town for the support of the schools of the town would operate to the advantage of the weaker outlying districts.

What might be expected of it.—Superintendent Edwards, of Illinois: As a consequence of the establishment of this system, I should expect to see better organization, better grading, an elevation of the standard of teachers' qualifications, more methodical and efficient work in the schools. Under that system schools would not be isolated as they are now. They would be each a part of a reasonable system.

A county system in Maryland.—Superintendent Newell, of Maryland: There are no townships in Maryland nor, so far as I know, in any of the Southern States. The unit of authority and direction for schools and other purposes is the *county*. I am glad that such a monstrosity as the *district system* has never been known among us. If we had it we should make every effort to get rid of it.

Township districts will be adopted.—Superintendent Estabrook, of Michigan: The system is sure to prevail. We shall come to look on our present system as if under dark ages. * * * The merits of the system cannot fail to commend themselves to the judgment of all who will give it their careful and candid consideration.

Works well in Massachusetts.—Superintendent Dickinson, of Massachusetts: The township system works infinitely better than did the district system.

Secures good local management.—Superintendent Morgan, of West Virginia: Under this system our schools have the advantage of a careful local management and all the advantages of the district system.

Gives satisfaction.—Deputy Superintendent Stewart, of Pennsylvania: The township system is entirely satisfactory.

Is being adopted in Maine.—Superintendent Luce, of Maine: The increase of fifteen in the number of towns that have discarded the district system—a very marked increase as compared with the number abolishing in any previous year—is, therefore, evidence of better schools in as many towns. It is also evidence of the growth of a public recognition of the need of reform in this direction, and is thus a promise of better things to

come. The Legislature of 1887 can do no more beneficent work for the State than to wipe from the statutes every provision therein, under and by which the school-district system exists.

All experience goes to prove beyond possibility of disproof that schools managed on the town plan are more economically managed, and are in every way more efficient than those managed on the district plan.

Desired in Vermont.—Superintendent Dartt, of Vermont: The experience of another two years in the common schools of the State has still more fully convinced me of the utter inefficiency of our plan of district management. A large number of our people have felt this to be true for some time, and have urged a change throughout the whole State. These people are intelligent; they are actuated by unselfish motives, and have a strong desire to see our schools lifted out of this low and unsatisfactory condition to one of efficiency, strength, and progress. No movement was ever advocated with a more patriotic spirit than this one for the improvement of our system of education for the children of our commonwealth, and none is worthier of the careful, unprejudiced, and thoughtful consideration of our citizens.

It is worthy of note that most of the teachers and nearly all others who have been practically connected with the schools, favor the change of the district for the town management. Nearly every gathering of teachers in the country has indorsed this movement. * * * Not only is the district system inefficient, but it is inequitable and unjust. It discriminates against the poor in favor of the rich, and gives no equality of opportunities, having wholly outlived its usefulness as a promoter of intelligence among the people.

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There are now in Vermont thirty towns using this system, and it is working well. As for myself I believe in the town system. The old district system has served its day and should be now made to give place to a better. * * * This town system is right in the line of *progress and it can not be stoppèd*. It will move on in spite of ignorance, prejudice, and parsimony. Let us work for it. We are right, and I believe the right will prevail.

Township districts desired in Texas.—Superintendent Cooper, of Texas: In the States which have been divided into townships, the town has been found to be the most satisfactory unit for the subdivision of the county for school purposes. The plan of forming districts so small that one school for each race will supply the needs of all the children in the district has been found to be liable to nearly the same objections which have been found to lie against the community system in Texas. The North-western States, where we find the best system of rural schools, are gradually abandoning the one-school district for the township district, containing from five to fifteen schools. Some of the Southern States have adopted the township district, notably Alabama, and all find it the best possible unit. This instructive fact will furnish us with a safe guide in fixing the general size of school districts. The area of the township is about 36 square miles.

II.—ARBOR DAY.

Why we should have an Arbor day.—Superintendent Hoitt, of California: We have heard much and read more of the wanton destruction of our forests. Our schools can not protect the forests, but they can raise up a generation which will not leave our hill-sides and mountains treeless; a generation which will frown upon and rebuke the wanton destruction of our forest trees. There is no spot on earth that may not be made more beautiful by the help of trees and flowers. If, under the influence of a manifest destiny, the child must inevitably leave the home of his childhood, we may at least surround the home with beauty and make it attractive, so that his heart, in whatever distant land it beats, shall, like the sea-shell far from its ocean bed, retain some faint whispers of its early dwelling place.

Trees everywhere exert a controlling moral influence. We may not be able to tell why or how it is done, but the fact we know and feel in our every day's existence. Every sapling which we plant in our door yard or upon the naked sidewalk in front of our dwellings makes, with every spreading branch, expanding leaf, and opening blossom, home pleasanter and recollections of it stronger. Our schools bear a near relation to the State, but a much closer relation to the family, and when school opens the family life of the whole district is stirred up as if it were a festival day. We should not be satisfied till the school grounds, as well as our homes, are such in themselves and in their surroundings as shall not only be attractive, but shall surely tend to strengthen, elevate, and ennoble human character.

Let us have a legally appointed "Arbor day," and take the children out of our schools, and, under proper directions, teach them how to plant shade trees, shrubbery, and flowers. Teach them how to prepare and plant the lawn with their own hands, and to care

for these things when they have been planted. Thus may over a quarter of a million of children be taught to think of the value of trees, become familiar with them, and learn to love them. Thus may they take the hand of nature and be led to noble thoughts and worthy deeds. For one day, at least,

"Come forth into the light of things; let Nature be your teacher."

Good effects of Arbor day.—A. F. Hess, school superintendent of Jefferson County, W. Va.: Arbor day has accomplished much good in having our school grounds properly fenced and beautified.

Arbor day may be devoted to general improvement of school grounds.—Superintendent Higbee, of Pennsylvania: Many of our schools for various reasons were not able to observe the regular spring Arbor day in answer to the Governor's proclamation. We are anxious that the good work so happily begun, may continue and give still larger results for the benefit of the schools, and for the general good of the Commonwealth. It is not necessary to confine Arbor-day work exclusively to the planting of trees. The proper grading of school grounds, the removal of stones and all refuse, the careful guarding of trees against the winter winds, the protection of tender shrubbery from destructive frosts, the dissemination of useful information on the subject of fruit and shade trees, of forestry, and landscape gardening, the gathering and storage of seeds for the next spring's planting, botanic lessons especially devoted to the flora of the district, with definite reports from season to season of what has been done in the locality, what good results have followed therefrom, and what it is proposed shall yet be done—all these are proper subjects for Arbor-day observance, and well deserve attention.

Such digression from the ordinary routine of school work will be profitable to the children in many ways. It will give them some sense of what they themselves can do by organized effort, having some definite aim in view. It will challenge them, each and all, to take part in work for the general good, and help to awaken a proper pride in the good appearance of the whole neighborhood in which they live. It will add to their habits an aesthetic culture, which will increase with their increasing years; and the vision of what their own hands have done in beautifying their school grounds and improving and adding value to their home surroundings will delight them more and more as season follows season, through not only their school life, but that more mature life of manhood and womanhood, for which, in large part, the school is designed to make preparation.

III.—COMPULSORY ATTENDANCE.

The necessity for compulsory education.—C. E. Walling, school superintendent of Morgan County, W. Va.: Some say we must educate the masses so they will appreciate an education; but how are we to do it? The greater number who do not avail themselves of the opportunity offered by the free schools are the children of poor and ignorant parents, who will be allowed to grow up in ignorance, and generation after generation will do the same unless the law forces them into school until the one generation is educated, then the greatest difficulty will be overcome. If parents are remiss in their duties to their children, and not aware of the great responsibility resting upon them, they should be made sensible, and be compelled to discharge a parent's duty.

IV.—DISCIPLINE.

The model school-government.—School committee of Salem, N. H.: There can be no permanent prosperity or real progress unless the scholar is subject to the rules. Where this does not exist the teacher is nothing and the school is worthless. It should be a discipline founded on respect, a government administered by leading rather than driving the pupil. To have it perfect, there should be a willing obedience to authority without the display of passion. True discipline is something more than mere order; it is a cheerful submission on the part of the scholar to his instructor, not from fear, but from love. The teacher wins the heart, inspires reverence and esteem, in a word, governs without seeming to govern or causing the pupil to feel that he is governed.

Good discipline the first essential of a good school.—Superintendent William E. Buck, of Manchester, N. H.: Correct habits are largely the result of proper discipline; therefore good discipline is the first essential of a good school, and one's ability agreeably to discipline a school properly is the first mark of his fitness for a position at the teacher's desk. Ordinarily, the condition of the American family is such, at the present day, that good order at school is generally and agreeably secured by the good sense and tact of the teacher, supplemented by the moral support of parents; but occasionally an apparently incorrigible pupil is encountered, who, "like a hornet in a bee-hive," brings consternation to the queen, creates confusion in the swarm, and threatens all with destruction. In the bee-hive the death of the offender or his expulsion is immediately deter-

mined; and in the school the wilful disturber must be promptly met with subjection or exclusion.

It may be properly inferred from the foregoing that, in the matter of school discipline, I regard as best the mildest means that can be made successful, but that the means must be successful at all hazards. So it would seem that there may be instances where corporal punishment might be regarded as justifiable; but it should be inflicted only as a last resort, and then not hastily or inconsiderately. I hold it safe to enunciate the general principle, that whatever a judicious parent may rightfully do in the matter of correcting his child and enforcing obedience, the teacher, standing in the place of the parent, would be justified in doing; and yet, while believing that corporal punishment is justifiable in some instances, I think it well that the teacher should consider in each case appearing to merit its infliction whether it would not be wiser to pursue a different course from what the parent even would be likely to take in regard to a misdemeanor deserving corporal punishment; for the teacher has the parent back of him, and, by conditioning the case so that the parent will have to take cognizance of it, the co-operation of the parent may be secured when otherwise it might be antagonized.

The alternative for corporal punishment in school is suspension therefrom; and in no instance when such suspension occurs should the pupil be allowed to return to school, except under conditions which would cause him, his parents, the school, and the teacher, all to feel that whatever of good could have been gained by the infliction of corporal punishment had been attained, unless, indeed, it should become clear that the case was not deserving of such punishment.

Corporal punishment discouraged in Louisiana.—Rules and regulations of Louisiana State board of education: Rule 27. Those teachers who are the most successful in maintaining the order and discipline of their pupils, without the use of corporal punishment, other qualifications being sufficient, shall be awarded by the board a higher degree of appreciation, and be preferred above all others in promotions and appointments.

Corporal punishment sometimes necessary.—City Superintendent Bettison, of New Orleans, La.: While it is true that in the best schools there is the least punishment, and that the best disciplinarian is he who can cause his pupils to govern themselves, it is not to be inferred that it is a teacher's duty to submit to anarchy rather than to resort to corporal punishment.

V.—EDUCATION.

Education the defense of the State.—Territorial board of education of Dakota: We recognize the influence of education upon the individual, in the family, the church and society, but do we not overlook the fact that it is the defense of the State? Education is, in the highest sense, the charge of political society. It is so important an agency as to justify compulsion on the part of the State. To education the State must look for trained patriotic citizenship, for the promotion of morals among the people, and for assurances for continued progress in everything that is wise and beneficent in our present civilization. The State should guarantee to every child a good education, and compel the attendance of those who would voluntarily absent themselves, or whose parents, through motives of avarice or neglect, would prevent attendance. The obligation of free education is with the State, and no local influences should be permitted to deprive any child within the State of some opportunity for at least an elementary education. It may be opposition to free public schools, it may be poverty caused by drought or cyclone, it may be extravagance in taxation, it may be the general neglect of local officers; no matter. In any case the State should step in with some funds and provide a school for a short time, and enforce the attendance of all children of school age.

Public education not a matter of charity.—Superintendent Finger, of North Carolina: Very frequently we hear the statement that it is robbery to tax one man to educate another man's children. This sentiment prevails to some extent everywhere, I suppose, and those who hold it regard public education as a *charity*. They are, perhaps, willing to dole out a little education to the poor on the same principle that they would give them a loaf of bread to keep them from starving.

Such persons reason from other premises than those which the founders of our Republic used in support of public education. The foundation of public education is *broad statesmanship* and not *charity*. The friends of the public schools in the past, and now, do not think that our property or our lives are safe in the hands of ignorant voters, and they do not think that our free governmental and religious institutions can long exist without liberal provisions made by the State for the education of all the voters. They believe that the rich man, who does not even think enough of the public schools to patronize them by sending his own children to them, is made richer by them, in that he is made securer in the possession of his wealth, and that verily his contribution to them "does not impoverish him."

Besides, it is a fact that any man may know by a little investigation that general in-

telligence and material prosperity and power go together. We have in our own country many illustrations of this fact in the history of States and communities. I need not point them out. Perhaps Prussia affords one of the most notable illustrations of this fact.

The value of an education not to be estimated in dollars and cents.—From report of school committee of Kingston, N. H.: Knowledge cannot be weighed in a commercial scale. The primary question is not whether a man can make ten dollars per week, uneducated, or twenty dollars per week, educated; it is, how can he make the most of himself, how can he best develop his personality, how can he accomplish the greatest good for the greatest number? It is here that our so-called business colleges err in principle, their aim being to educate so that their graduates may get money, and make money-getting the mainspring of life. The dollar suspended before the mental vision by these institutions is so very large that it obscures the nobler motives, so that goodness, honor, and philanthropy are seen but dimly, if seen at all. A bright young fellow recently asked, "What good will it ever do me to study algebra?" He was measuring the value of knowledge by this little tape-measure whose divisions are the symbol \$. It was explained to him that the "good" consisted in the mental advancement accruing from disciplining the mind to systematic reasoning; that while he might never use what he learned in the exact form in which he learned it, and while he might apparently forget it, yet the effect of his study would remain through life in the ability to think better and to grapple more successfully with difficult questions. An esteemed friend recently put this thought neatly when he said that while he could not now recollect what particular food he ate for dinner a month ago, yet that food went towards building up the wasted physical tissues; and so while he could not now remember the formulas and principles of the higher mathematics which he studied in college years ago, yet those formulas and principles helped to build up his mind and to make him intellectually the man he has become.

A State's welfare demands education.—Superintendent Cooper, of Texas: The stake of the parent in the correct education of his children is deep, but that of the State is deeper. The parent *may* be dependent on his children, but the State *must* be. The parent educates his children from motives of pride and benevolence; the State educates by the first law of its existence, that of self-preservation. Patriotism and philanthropy unite in fostering universal education, and utilize for this purpose the strong right hand of the law.

VI.—EVENING SCHOOLS.

Evening schools becoming more popular.—Marshall P. Hall, of Manchester, N. H.: We need a further development on the side of practical education, as represented in the evening schools and in certain departments of the high school. Increased interest in evening school work is reported from all our New England towns. These schools appear to be firmly established as an integral part of the common school system. As they are chiefly patronized by working people, and their attendance increases as the hours of labor lessen, their growth is a significant sign of the times. The ordinary evening school is capable of great development for good. Besides the usual instruction, advantage might be taken in its classes to teach the principles of our Government, and so counteract some of the political evils which exist in cities. Our own evening schools may be directly improved by the employment of better teachers, the introduction of other and more interesting studies, and by a more watchful supervision.

Evening schools for special instruction in subjects relating to the trades and industries are also increasing in number in manufacturing towns. Our classes in mechanical drawing are a beginning in this direction. They should be made free to every apprentice and artisan in the city, and enlarged until all applicants can be accommodated. Every man who attends them is made a better workman; he more highly respects himself and his calling; he is stimulated to invention and animated to become a master in his business.

VII.—GRADED SCHOOLS.

Graded schools do better work.—Superintendent Smith, of Tennessee: Better supervision can be had by having three men to supervise the entire district, and graded schools can be established—that is, schools can be established—where two hundred or three hundred children can be assigned to one house, and several teachers employed in the same school building, which will insure better work in every respect.

When the district directors fully understand the importance of graded schools, and begin the establishment of the same, we will make a grand advancement in school work.

One serious drawback to the efficiency of our schools is the establishing of too many schools in a district. We should have fewer schools, more children to a house, and longer school terms.

Grading of country schools.—Superintendent Lawhead, of Kansas: The sentiment that more and better work can be secured by a wise grading of our country schools pervades the best school men of all the States, and in States that have tried the plan it meets with much favor. * * *

In my opinion, the following are the objects that should be sought, with some of the advantages that would result from the adoption of a system of gradation for ungraded schools, namely: (1) An ultimate reduction in the number of classes; consequently more time could be given to each class. (2) More systematic work could be done, hence each pupil taught by example the necessity and practical benefit of system in every thing—a very important element. (3) Each pupil would realize that his advancement would depend upon the thoroughness with which he performed his work, therefore he would be stimulated to do everything in the best manner possible.

VIII.—HIGH SCHOOLS.

Secondary schools necessary to a complete system of public education.—President E. M. Turner, of West Virginia University: The great outcry is against inefficient teachers. They are called smatterers, empirics, mechanical in their methods, superficial in their attainments. Much of this criticism is well-founded; yet the teachers are not entirely to blame. The stream cannot rise higher than its source. With no opportunities for education higher than those furnished by the primary schools themselves, how can it be expected that they should be thoroughly qualified? Nine-tenths of the teachers of West Virginia have never had any advantages beyond those of the primary schools of their neighborhood, and they are simply perpetuating the evils of the system as they have learned them in the school-room. Institutes do something, but they can not be expected to do much toward raising the standard of qualification. The mechanical methods and superficial knowledge of teachers can not be got rid of until the teachers have better facilities for education. The primary schools must be lifted up by giving the teachers better instruction, and we can not give our teachers better instruction until we establish a system of higher schools, where, in common with all others who choose to attend, they may be better taught, and taught far beyond the subjects they are required to teach. It is a well-recognized educational maxim, that no teacher is properly qualified to teach a school of given grade until he has been thoroughly instructed in the next higher grade. The primary teacher in the vast majority of our schools must be also a grammar-school teacher, because he has pupils of all grades. Hence a system of high schools or secondary schools is necessary to the highest efficiency of the primary schools.

These secondary schools should be taught by the best instructors to be obtained. The teachers should all be liberally educated men and women. By "liberally educated" I mean educated in the true sense—not mere book teachers, mechanical in method and bound down by a superficial notion of the object and process of their work, but thorough masters of their profession, widely *knowledgeed*, thoroughly developed and cultured, master of their own persons and tastes, able to apply the most intelligent methods and develop the highest power and efficiency in the pupil.

But such teachers can come only from the highest educational institutions, the college and the university, where they have had the benefit of such instructions themselves. From these they may go down to the secondary or high schools and lift them up, and with them elevate the primary system. Then, a complete system of public education implies, of a necessity, a primary system, a secondary system, and a university or college at the head.

IX.—HYGIENE.

School-rooms should not be crowded.—Superintendent Chapman, of New Jersey: It should be quite unnecessary to point out the folly of placing a hundred or more pupils in a single room. These large classes are all of primary pupils, usually beginners. No teacher can do justice to so many pupils, and a dozen teachers can not take proper care of them, crowded as they are in small rooms. They not only fail to receive the instruction which is their due, but they contract habits of listlessness and inattention, which sadly interfere with their progress in after years. These results are serious enough, but when it is added that, as our school-houses are constructed, no child can remain in a room with so many others for any considerable time without seriously impairing its health, it should be sufficient to deter any school officer or any parent from consenting to such conditions.

X.—IRREGULAR ATTENDANCE.

Evil effects of irregular attendance.—Superintendent Patterson, of New Hampshire: In every town there are parents who, either too ignorant to appreciate or too selfish to re-

gard the interests of society or the welfare of their children, will, for the paltry value of a child's labor, or to gratify its love of play, become the conscious or unconscious agents in disturbing the discipline, breaking down the classification, and destroying the usefulness of schools by causing or allowing their children to be continually irregular in their attendance. The waste of school funds and the loss of intellectual and moral power to the community from this source are incalculable, for the good and the bad suffer alike from this unconscious criminality. As things are, it is impossible for teachers or school boards to remove the evil.

Value of high percentages of attendance.—Superintendent Powell, of the District of Columbia: "Figures," it is said, "never lie." Yet, in school statistics, if it is not known how they are obtained, figures may be the most deceiving rascals that ever told a tale. High percentages of attendance and punctuality on the face of them indicate advanced educational processes at school and high educational sentiment in the community, whereas they may have been obtained at the expense of the better and nobler impulses of the child, of the better and broader view of learning and growth, of other and equally valuable privileges afforded outside the school.

The teacher should know the value of sequence, continuity, and determined effort, and should seek to impress their importance upon the mind of every pupil, and should be estimated by his knowledge of causes of absence or tardiness rather than by the percentages made in either of these by his pupils.

The educating forces of the cultivated home and of society are so numerous and so valuable as auxiliaries for broadening and making practical the work of the schools that absence or tardiness occasioned by desire or opportunity may sometimes be excused in the pupil seeking these advantages. I would not encourage irregular attendance. Such is not the purpose of my writing. I wish only to emphasize the advisability and fairness of distinguishing between absence occasioned by carelessness of pupil or parent and that occasioned by opportunity and desire to profit by other valuable means of cultivation. Furthermore, I wish to emphasize the importance of recognizing the possibilities of the less fortunate of those who send to our schools, and to avoid, if possible, debarring from school privileges, even for a part of a week or a part of a day, any who may be detained from school occasionally to aid an indigent parent in the support of his family, or to assist a poor, hard-working, self-sacrificing mother in caring for an infant brother or sister for a part of the forenoon.

To know the cause of absence, to detect, encourage, and reform the careless and the wayward, to know and strive to reform the criminally careless and indifferent by all legitimate means should be encouraged in and made possible to our schools.

Children kept away on any sort of flimsy pretext.—Superintendent Buchanan, of Virginia: It is noticeable in the reports of many of the States that there is great irregularity of attendance upon the public schools. This is a great evil, and one for which it is difficult to provide an effectual remedy. Its causes are various. The fact that the public schools are free schools—charge no tuition fees—is doubtless one cause. When pupils enter a pay-school they must attend regularly or not get their money's worth. Irregular attendance on a free school entails no pecuniary loss. Hence, if parents are indifferent about their children's education, as unfortunately too many are, and know but little or nothing of the damage and annoyance of irregular attendance, their children are kept away on any sort of flimsy pretext.

In our cities stringent regulations in regard to tardiness and absence prevail, and the percentage of attendance compared with enrolment is very high. In the country greater irregularity is unavoidable, but it is believed that if boards of district trustees would adopt, with the advice and counsel of the school superintendents, regulations on the subject wisely adapted to the different conditions of country schools, they would be productive of good results.

XI.—LANGUAGE OF THE PUBLIC SCHOOLS.

Schools should be taught in the English language only.—Superintendent Cooper, of Texas: We have a large foreign element among our population. In some localities it is so strong in influence that it is able to enforce the use of a foreign language in the public schools. While we welcome thrifty and law-abiding citizens from every quarter of the globe, we should require that the children of our foreign-born citizens be taught in the public schools in the language of our laws and of our people. When natives of Germany, Sweden, Bohemia, or Mexico become citizens of Texas, they cease to be foreigners and become Texans, and their children should be trained to be in sympathy with our institutions. This will never be fully done so long as they retain as their vernacular the language of foreign and alien peoples.

Our common schools must be American.—Superintendent Kiehle, of Minnesota: The time has come when the State must give additional emphasis to the importance of the

common school as an ally of the State in training an intelligent and loyal American citizenship. * * * The first requisite, then, is that they teach thoroughly the English language as the language of the country. This is the language of our business and social life. It is the language of our history, our laws, and the only vehicle of American ideas. Other languages are necessarily un-American (not anti-American), carrying with them the traditions, associations, customs, and national spirit of other governments and civilizations; hence, if the youth of this country are to be Americans they must think and speak in the language of America.

They should be familiar with the great events of our history and the names of our patriots and statesmen whose courage and wisdom laid the foundation upon which we build.

All this should be the basis of an intelligent loyalty to government, a culture of political morality, and a sacred discharge of political duties as citizens at the ballot, as jurors, and in official positions.

It is necessary that public attention be called to this important service of the common schools, in view of the exceedingly large addition to our citizenship from foreign countries. The parents of foreign birth, with all their attachments to their fatherland, bring their children to America to share its liberties and the beneficence of its institutions. Their social and religious associations are among friends of their own language, and the common school is the only American institution within the reach of their children.

I am of the opinion that greater care should be exercised in protecting our common schools from foreign influences. Localities have come to my notice in which the schools have taken on a style of speech and instruction that is, to say the least, not American. The English language is not intelligently spoken by teacher or pupils; American history is never taught, and American literature is carefully excluded. The songs of our country are never sung, and the flag of the nation is unnoticed.

XII.—LIBRARIES FOR SCHOOLS.

Importance of public school libraries.—Superintendent Morgan, of West Virginia: The establishment of libraries in public schools or under the control of public school authorities, to be used in connection with the work of public schools, is an educational question of increasing importance. There are two facts which seem sufficient grounds for the establishment of these libraries. The first is the evil influence of pernicious literature, everywhere so abundant and made so seductive and attractive to childhood, and which the public library, accessible to the children of the public schools, must become the most effective means in combating. The second reason is the educational value of public libraries, not in the general sense meant when speaking of libraries, but as a great supplementary factor to the public school itself. The reading habit and the taste for good literature are matters of cultivation, and the formation of both should be commenced in childhood. An inquiring spirit and love of good books must form the best part of every child's education, and the public school and the public library, the great factors in popular education, should therefore work together.

When the time shall have come to pass that every child in the public schools shall have the privilege and encouragement of the school library, popular education will have taken a long step forward.

Teachers should be required to attend to the libraries.—Superintendent Hoitt, of California: In my opinion no better use can be made of a part of the school money furnished by the State to each district, than in expending a small portion of it in the purchase of suitable reference and library books, provided always that teachers are employed who will encourage and direct the proper use of them.

Better care, in many cases, should be taken of the school libraries and school apparatus. When a teacher enters upon his work, at the beginning of the school term, the clerk of the district should take his receipt for all library books and apparatus on hand, and no requisition should be drawn by the county superintendent for the salary of the teacher, for the last month of his term, till such teacher files with the county superintendent the receipt of the clerk of the district for all library books and apparatus which were placed in the care of the teacher at the beginning of the term, showing that all such articles and books have been returned to the library in good condition, allowance being made for wear and tear.

School libraries Americanize the children of foreigners.—Superintendent Kiehle, of Minnesota: The test of one year fully sustains the claims urged for the passage of the law. Where the people have been interested and have ordered books for their children the effect has been wonderful. I am informed of counties, largely Scandinavian, in which the districts are generally supplied with libraries. The effect of all this is that these children are rapidly becoming interested and informed in American history and literature. That means they are becoming Americans.

XIII.—MANUAL TRAINING.

Manual training does not retard the progress of the pupil.—Superintendent Chapman, of New Jersey: It is the united testimony of the teachers that the pupils who attend the industrial school retain their places or standing in their respective classes. No falling off in any particular has been noted. On the other hand, the change of work and the stimulus to excel in this particular kind of knowledge has rather added to the work the pupils are doing on their regular lessons. The fact that a dull boy has shown his class that he can do something has tended to elevate the standing of that particular boy, not only in his own estimation but in that of his comrades.

It enables the pupil to secure the larger number of, and at the same time clearer impressions from, the multitude of objects with which he comes in contact, and which are the basis of his thoughts. It increases the expressing power of the pupil. It develops habits of method and exactness; trains the eye to appreciate form, and trains the hand to represent and create form in accordance with established principles, and in training the eye and the hand, the system cultivates the brain.

New methods not always improvements.—Superintendent Brumbaugh, of Huntingdon County, Pa.: The intelligent school friend will remember that change is not always improvement; that retrogression is quite as possible as progression. Every new device, therefore, that comes pressing for attention must be carefully considered before it is accepted. There is a growing tendency to demand from our schools that which they were never designed to give, that which, under existing circumstances, they cannot give. It is not true that time spent in studying that which has no direct bearing upon the probable future business pursuits of the child is wasted time. It is not true that those branches which are apparently and generally regarded most practical, are the ones the child may study with most profit. Let it not be forgotten that cultured minds, filled with knowledge and skilled to application, will adapt themselves to any ordinary business pursuit more readily than those minds to which only utilitarian instruction has been given. Rather than demand manual instruction at present in our schools, let us demand more thorough mental training. What is needed is intensity, not utility; mental concentration, not physical application. His whole future touches the manual and quickens it into all needed activities; the mental is given in the school if at all. Let school be an all-sided preparation for complete living, not an apprenticeship for shop or factory. So far as manual training has pedagogic value embrace it. When it has mercenary motives it is fatal to incorporate it. "No man liveth by bread alone."

Highly endorsed by the supervising principals of Washington City.—Superintendent Powell, of the District of Columbia: The estimate given to these manual training exercises by those whose schools were affected is found in the various reports of the supervising principals. The consensus of opinions there found, given as they were after a year's observation and practical experience, with all the disadvantages that such training can possibly offer to a school system, is to my mind the strongest argument in favor of manual training that I have ever heard or read, and my investigation of this subject has been wide and thorough.

Manual training in the public schools advocated.—Z. H. Brown, superintendent of city schools, Nashville, Tenn.: The educational forces are at present being directed towards manual training, or industrial education. As is always the case, any new departure from that which has been so long established is met by strong opposition, and only by slow degrees does this opposition lose effectiveness. Anything so deeply rooted in the affections of the people as are the public schools will, when in seeming danger, awaken alarm. There are those who are unwilling to believe it possible for manual training to be carried along *pari passu* with the ordinary school curriculum; others claim they go hand in hand, each strengthening the other. There is still a third party who think it best to have the boys attend the training school in the evening after regular school hours. There is a total misapprehension on the part of the general public as to what is expected of the manual training school, and how it is to be attained. I can not better give my own views than to quote from another:

"* * * The demand to-day is not to lessen the intellectual culture which the schools are giving, but simply to add to it the culture of the eye and hand; not to fit children for any particular trade, but to qualify them to be intelligent workmen in any vocation. The idea which prevails that industrial schools are trade schools is as ridiculous as it is absurd. What advantage would there be in teaching a boy to be a shoemaker? Would he peg and stitch in competition with the steam power that is employed in the manufacture of shoes? Why teach a boy to be a blacksmith? Could he shape and weld in competition with the steam hammer? The teaching of trades is outside of the question of industrial education. The proposition is to amend the curriculum so that the graduate of our public schools shall not only have a fair literary education, but that he shall also be able to draw, design, work to plans, and handle tools."

XIV.—MORAL TRAINING.

Moral training should be given in the schools.—Superintendent Brumbaugh, of Huntingdon County, Pa.: Discipline is, and to my mind must continue to be, a matter of great importance. The State reasonably expects from the school, as a product, thoroughly disciplined citizens. The mere importation of knowledge or, indeed, the unfolding of a mind is not the leading result demanded by the State. What is of paramount value is training, discipline, correct habits, not merely of thought, but of action. There is, therefore, a moral demand made upon teaching. The school is a power which will be felt in the government of the future. This power needs more than awakening; it needs high intelligent direction. The schools must send out boys and girls whose habits of thought, system of business, and uniform adherence to right have all been awakened, stimulated, and exercised along the proper channels of life until the State may safely repose in them full confidence. Thus only may we meet the expectation and reasonable demands made upon us. Our instruction, therefore, needs to be so modified as to include careful training in civics and in the higher principles of morality.

XV.—NATIONAL AID.

National aid needed in Georgia.—Superintendent Hook, of Georgia: The colored people show great anxiety as well as aptitude to learn, and it is to be regretted that the noble effort of our State has not been backed up by the General Government by the passage of the Blair bill. Every consideration, as it seems to me, of justice, humanity, and right demands such action on the part of the National Government in behalf of these people, upon whom that Government has cast such important responsibilities.

National aid to local efforts advocated.—Professor Chambers, editor of the Progressive Teacher, New Orleans: No one believes more firmly than I in the wisdom and justice of that measure now pending in Congress known as the Blair bill. The same principle by which a State government is interested in the welfare of every one of the citizens composing its counties and cities holds equally as good when we say that the General Government should be interested in the citizens of its constituent States. But while I believe help from the General Government to be good, I also believe that help from the State is better, and best of all is that *self-help* that township, district, or community invokes when it levies its own special tax, expends it at home, and is directly interested in the expenditure.

Needed to overcome illiteracy in Alabama.—Governor Seay, of Alabama, in his message to the Legislature, November 3, 1888, says: The great burden which has rested upon finances, and even more weightily upon our consciences, has been the cost of public education. But for this increasing burden our affairs would indeed be easy, and yet very few thoughtful men will say that the policy of the State had not been both wise and beneficent. * * *

The census bureau of 1880 reports in a voting population of 260,000 there are about 121,000 electors who cannot write; and that there are within the borders of this State, in a total population of 1,262,000 souls, about 371,000 over the age of ten years who can not read.

This burden of illiteracy, which we have been stooping under, was largely imposed by the Federal Government, which by a paramount force debased our suffrage and destroyed our property. This edict more than quadrupled the illiteracy of our citizenship and reduced our property from the grand total of \$650,000,000 to \$150,000,000. The further immediate effect is felt by a division of the tax money from this narrow fund between the children of the two races in the State. Therefore it remains clear to me that the Federal Government should at least divide the burden which has been imposed. But in the mean time we should continue in the path which our predecessors have so bravely followed, and we should make an additional appropriation from the State treasury to the public schools of the State. * * *

It is not claimed that this policy should be pursued merely because it comports with the dictates of enlightened philanthropy, though certainly it should be no cause of challenge to its expediency that it is in harmony with it.

That "the Prussian school-master won the battle of Sadowa," is the opinion of one who is neither a sentimentalist nor a humanitarian, but a grandee and a prince, a severely practical soldier and an intense aristocrat. * * * It is unsafe for us, however, to rely either on Federal aid, which will probably be temporary, or on an appropriation from the general funds in the State treasury.

The South needs assistance as never before.—Superintendent Palmer, of Alabama: Certainly if there ever was a time in the history of the country when Federal aid should be given to education, that time is the present, when the surplus in the Treasury has so contracted the circulating currency as to threaten the destruction of the commerce of

the country and to seriously damage every business enterprise. This surplus should be, must be, returned to the channels of trade and to the people from whom it has been wrongfully taken, because not needed for the proper administration of the Government; and for what purpose can it be, is it more likely to be, appropriated that would benefit the people—the people of the South—especially of Alabama—and be restored to the channels of trade more speedily than by appropriating it to the cause of education in the several States?

National aid as given in 1837 desirable.—Governor Taylor, of Tennessee: If, after the General Government shall have discharged all its current obligations and met every demand; if, after this, there still remains a surplus of money in the Treasury not applicable to the national debt, because not yet due, then, I said, the appropriation of such surplus for educational purposes, stripped and freed from every possible condition of Federal supervision or control, would be an inestimable blessing to the children of the State. I said, in substance, and say now, that such a surplus under such circumstances, and unburdened with conditions prejudicial to the local government of the States, could not flow back to the people (to whom it belongs) through a better channel than the school room. I want to be understood. We do not want Federal aid to education unless it is appropriated to the State of Tennessee, to be used under her own laws, without any Federal control whatever. We want it as we received it fifty years ago, when "Old Hickory" Jackson was President of the United States.

XVI.—PRIVATE SCHOOLS.

Private schools detrimental to public schools.—Superintendent Williams, of Utah: While from a casual view it may appear that no disadvantage to the district schools is likely to result from their [private schools] establishment and successful progress, yet it seems to me that in this very condition is found an element that must operate to the detriment of the public schools, tend to hinder their advancement, and lessen their influence. * * *

If the public schools are not made worthy of the support of the public without distinction of party, it may be naturally expected that the influence, whatever it may be, of those not patronizing them will be exerted against their maintenance at the public expense.

XVII.—PRIZES.

Prizes stimulate the wrong pupils.—City School Superintendent Bettison, of New Orleans, La.: The system of awarding prizes has often been discussed, and generally condemned. The offer of a prize is a powerful stimulus, but it stimulates those only who need no such incentive; it deprives them of the rest and recreation their nature requires; it often creates the bitterest heart-burnings, and even robs the contestants of some of their noble appreciation of learning for its own sake, which, before the offer of the prize, was growing with their growth.

The system of marking recitations and reporting the relative standing of the pupils has its advantages, though it is often much abused. If a pupil knows that he can not be head, he still would rather be tenth than eleventh, and the class receives a moderate stimulation throughout.

XVIII.—PUBLIC SCHOOLS.

Development of the school system.—Superintendent Draper, of New York: The public school of to-day is a public school in an entirely different sense from what it was two hundred, one hundred, aye, even fifty years ago. Then it was maintained for the well being of the child, now for the safety of the State. Then it was supported by private contribution; its advantages were bought and paid for like any marketable commodity; or it was maintained as a public charity for the help of the poor. Now it is supported by the entire people, through a general tax upon all interests, upon the ground that it is a thing essential to the promotion of good citizenship, to the protection of property, to the safety and preservation of the State. The last vestige of personal support and personal control, as well as the last taint of charity, has disappeared.

Public schools must still be improved.—Superintendent Morgan, of West Virginia: The educational systems and institutions of to-day are the results of long years of growth, having passed through many changes in reaching their present state of efficiency and completeness. Although in every way more perfect and efficient than those of any preceding age, still the educational systems of to-day have not reached their highest degree of efficiency, nor are they to be considered as finished products. In obedience to the great law of progress, they must continue the work of change and improvement to meet the demands of the onward march of civilization. Marvelous as has been the growth of popular

education, the public school system is, comparatively speaking, yet in the first stages of its development and usefulness. It must go forward with the work of improvement as public sentiment becomes more liberal, stronger, and more enlightened. Many obstacles that now clog the wheels of progress must be removed, some by the force of public sentiment and some by legislation. The educational interests of a people are matters of the first and highest consideration.

The public school system was established because it is necessary to the public welfare. Any failure, therefore, to provide for its highest efficiency, is a failure thus far to provide for the public welfare. Through the agency of the public school every child is expected to receive that elementary training which forms the necessary qualifications for future citizenship and usefulness, and, so far as practicable, the State should see that every child does receive the advantages of this elementary training; at least, the State should see that no child is prevented from receiving these advantages which have justly been called its birthright.

Public schools awaken a desire for knowledge.—S. G. Pyle, school superintendent of Tyler County, W. Va.: It is not merely the information and knowledge gained in the short stay of boys and girls in our free schools that educates them, but it is the inspiration there given to learn more, and the avenues and highways opened and the directions pointed out by the teacher, to which a higher, more thorough and practical knowledge can be gained through individual efforts and personal sacrifices.

Public schools should have public interest.—Superintendent Moody, of Idaho: Our public schools are the product of public sentiment, and until the people are aroused to a point where their interest will become active in school matters and in educational affairs little can be done for the improvement of the school system. In communities where the majority of the inhabitants never enter the school-room, where the conduct of school matters is left to the control of irresponsible individuals who receive no pay and too often are too ignorant to perform the simple yet responsible business of the office, the task of arousing a proper interest is almost hopeless.

A cause of opposition to the public schools in the South.—Superintendent Finger, of North Carolina: A prominent ground of opposition to public schools in this State, and in the South generally, is the burden cast upon an already impoverished white population to educate the negroes, who pay so small a proportion of the taxes. This ground of opposition is intensified by the belief that is more or less prevalent that education spoils the colored people as laborers, to their own damage and the damage of the white people, who own almost all the lands. It is said that when you "educate a negro you spoil a field hand."

On this point it may be said with truth that the negro's sudden freedom and citizenship, for which he was unprepared, the privileges of education and all the new experiences he had during and soon after the War, including much bad leadership, completely turned his head, so to speak. Forced labor to him had, during slavery, been his peculiar hardship and curse. In his ignorance he thought the new conditions, and especially the privilege of education, were to relieve him from this curse of labor. The old negroes went earnestly to work to learn to read. They failed, but attributed their failure to lack of early opportunities. But they resolved that they would secure education for their children, and, with this special end in view, *the escape from manual labor*. The present generation of younger negroes has been educated too much with this purpose in view, and, because of this wrong idea, it is true that a smattering of education to many of them has caused idleness and laziness.

Schools of different grades should be established.—Superintendent Cooper, of Texas: The schools should be classified into primary, intermediate, and high schools. The primary schools should be limited to the subjects required by law to be taught in every public school—spelling, reading, writing, grammar, and composition, elementary arithmetic, geography, and primary history, including elementary instruction in the duties of citizenship. Forty-nine fiftieths of all our public schools belong properly to this class. The intermediate schools should be located by the county superintendent and boards of trustees acting together, so that not more than one should be established in each justice's precinct, and should be allowed to give instruction in all the subjects of the primary school and such other subjects as are required for admission to the high school.

A high school should be selected or established in each county by the county commissioners' court, with the approval of the county superintendent, to which any pupil of proper qualification within scholastic age, resident within the county, should be admitted free of charge.

Necessity for good common schools.—Superintendent Rice, of South Carolina: Our poverty prevents many children from leaving home, and the great number must be educated in the local schools. The most important school in the State, to the ordinary citizen, is the one at his door, and he should spare no pains nor expense to make it so good that

the children of himself and neighbors may receive first-rate common school training therein.

The people should take an interest in the schools.—Superintendent Logan, of Montana: The public is the most powerful agency, if properly employed, in working out the salvation of the schools, for they should control and be held responsible for the present, and, to a certain extent, shape the destiny of the future.

Yet we find them often relegating to teachers and other officers influences that they alone should control.

No matter how competent the teacher, or how zealous and mindful of interests are boards of trustees, if the public withhold their sympathy and support and allow their interest and vigilance to relax, just in that proportion will the schools suffer and progress be impeded; and the extra duties thus imposed upon teachers become barren of the best results.

They too often consider their work finished when taxes are paid and imposing structures are erected for school purposes. This is a great mistake, for schools will not successfully run themselves.

Suspension of pupils.—Superintendent Draper, of New York: May children be suspended or expelled from the schools? I have no doubt about the right of the school authorities to deprive children of the privileges of the schools. It can only be done for good and sufficient reasons. A child with an infectious or contagious disease; a child of such utterly depraved morals as to be beyond redemption and dangerous to others; a child of such viciousness and incorrigibility as to be beyond control; a child who comes with such irregularity as to make his attendance only valueless to himself and detrimental to the school, may unquestionably be put out of the school. But the cause must be a grave one. The right to attend the schools must not be abridged except for reasons which tend to the destruction of the school itself. The suspension of school privileges can continue no longer than the reason for it exists. If the child comes ready to abide the discipline of the school, and in such condition that his presence is not injurious to the school, he must be admitted.

XIX.—REVENUE.

Local taxation preferable.—Governor Seay, of Alabama, in his message to the Legislature: The intelligent tax-payer does not complain so much at the rate of taxation as at the mode of expenditure of the tax money. Where the tax is a local one, and is raised and expended in the immediate view of the tax-payer, and for a local purpose that he deems valuable for his community, it is paid readily and with alacrity.

XX.—SCHOOL-HOUSES.

Importance of good school buildings.—City Superintendent Babcock, of Oil City, Pa.: Pleasant, well-ventilated, and well-lighted school-rooms are not only a convenience, they are a necessity to good work. This has been demonstrated in our experience. In the new rooms the work was far superior to that accomplished by the same pupils in the rented rooms, which, though the best that could be obtained, are ill adapted to school work. A community can make no better investment than building good, even beautiful, school-houses. However good otherwise the school may be, the effect upon the pupils' characters and tastes of a rude, barn-like school-room should not be considered as the result of a wise economy.

School-houses should be built with reference to future needs.—Superintendent Williams, of Utah: Where a population has become permanent, and every reasonable probability is that it will gradually increase, the erection of a school building should be one of great concern to the people, and it should be built with reference to the future rather than the present.

There is no reason why buildings for school purposes should not last through the education of several generations of children, and with that view the structure should be planned and erected. To do this, however, involves necessarily the raising of a considerable sum of money, a burden that would be borne with difficulty if imposed at once, or within two or three years. To avoid the imposition of so heavy a burden within a brief space of time * * * provision should be made by law whereby districts might issue bonds, and thus raise an amount of money adequate to supply such structures, with a provision for levying a light tax annually to gradually discharge the indebtedness.

School-houses to be used only for public schools.—Superintendent Higbee, of Pennsylvania: It certainly is a plain principle of law that corporate property must be used solely for corporate purposes. Otherwise all the school property of the Commonwealth might, by a simple vote of directors, be devoted to any purpose they saw fit.

In the syllabus of a decision rendered by Hon. George W. McIlvaine, chief-justice of the supreme court of Ohio (35 Ohio, f. 143), it is held first: That "boards of education are invested with the title to the property of their respective districts in trust for the use of public schools, and the appropriation of such property to any other use is unauthorized," and second: "That a lease of a public school-house for the purpose of having a private or select school taught therein for a term of weeks is in violation of the trust; and such use of the school-house may be restrained at the suit of a resident tax-payer of the district."

In rendering the decision this able judge says: "The questions in this case relate solely to the power of a board of education to appropriate the public school-house of its district to private uses, or indeed to any use other than public schools." After citing the Ohio enactment for the reorganization and maintenance of common schools, which defines the powers and capacities of school directors in language almost the exact parallel of our enactment above quoted, he says: "By virtue of these sections, all public school-houses are vested in the boards of education in trust for the use of the public or common schools, and the appropriation of them to any other use is unauthorized and illegal."

In the case submitted to us, it is stated that the board of directors have rented or leased a public school building for the use of a *parochial school*, where the peculiar dogmas and usages of a particular church are promulgated and taught, or where only a certain distinct class of children are admitted. In this case, granting the statement of facts, there is not only an unauthorized violation of trust, but a seeming indifference to what is explicitly forbidden by the Constitution of the Commonwealth itself.

A school is not sectarian because taught by a minister, or priest, or any church official. But a school controlled or managed in the interest of any particular church organization, upholding its peculiar confession and ecclesiastical practices, and used for any class of pupils, exclusive of others, is certainly sectarian. It does not, in any sense, belong to our system of public schools. On the contrary, no money raised for the support of the public schools can be used for its support without a direct violation of the Constitution. Were school directors permitted to lease our public school property thus, at their own will, for the use of parochial schools, the ecclesiastical convictions of the directors could turn our public schools into as many different kinds of church schools as there are different denominations in the Commonwealth. The point is too plain to require any further explanation.

Some may be willing to grant that directors can allow school buildings to be used out of school hours for such incidental purposes as singing schools, debating societies, etc., without justifying an injunction of restraint, although there has been a decision in Connecticut, by a divided court, even against this (see 27 Connecticut, f. 499); yet here the school building as alleged is used, not incidentally, but exclusively for a purpose not contemplated in the law and forbidden as regards statutory schools by the constitution itself. The very fact that the school building is rented, or leased, or granted for the temporary use of a school is sufficient evidence that its essential corporate use is perverted; for public schools do neither lease, nor rent, nor ask for the temporary use of that very property which, by public tax, has been purchased, and is to be held in trust for their permanent use alone.

XXI.—SUPERVISION.

The best men should be chosen for county superintendents.—Superintendent Hoitt, of California: No officer in the State is of more importance to the community in which his duty calls him than the county superintendent of schools. He should be required to give his whole time and attention to the schools of his county, and he should receive adequate compensation for the important services rendered and the responsibility assumed. He supervises to-day the training of the citizens of to-morrow. The people expect him to be, and he should be, a man capable of leading, directing, encouraging, broadening, strengthening, and elevating the character of the community in which he lives.

Corporations provide for supervision.—Superintendent Thompson, of Arkansas: The State should manage her public interests on as sound business principles as private affairs are looked after by individuals who invest capital from which they expect large dividends. Neither individuals nor corporations invest money without providing for careful and intelligent supervision of such business by agents, skilled each in his particular line of work. Our free school system is a public enterprise, supported by the State and local taxation, by which the State hopes to secure a more intelligent class of citizens than we have at the present time. * * * Considering the large fund invested, and the interest the State has at stake, it appears vastly important that the most careful and intelligent supervision should be secured; a supervision intelligent, vigilant, and active in every detail of this great work.

Necessity for well-paid supervisors.—Superintendent Logan, of Montana: The necessity of thorough supervision over the public school system has demanded almost universal recognition, as nearly every State and Territory at present has general as well as some system of local supervision, either county or district, and wherever such supervision is lacking it is shown most conclusively by authenticated reports that the absence of it is inimical to the best interests of education.

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Without county supervision I believe there can be no uniformity of work or concentrated action. You ask, then, where lies the difficulty? I answer in the law that creates an office without prescribing qualifications or providing a salary that reaches above the dignity of a mere stipend or pittance. The salaries of this Territory range from a minimum of three hundred dollars to a maximum of one thousand dollars per year. Now these are false ideas of economy, and threaten our future welfare as a people.

Now let me ask, can we reasonably expect to avail ourselves of the services of energetic and scholarly persons, thoroughly qualified by educational and natural endowment to do this work, or shall we not rather be compelled to procure those whose services are not worth more than this amount in other fields of less responsibility, or others who, if qualified, can afford to give but a little of their time, while their greatest and best energies are employed in more absorbing and profitable channels? How would we consider and what would be the result if a business man employing hundreds of skilled laborers should place as superintendent over his business one having a limited knowledge of the work and at a salary of one-half or one-third paid the average workman?

Duties of a county superintendent.—Superintendent Rice, of South Carolina: The humblest citizen has the desire and is entitled in this Christian land to claim that his children shall have the protection and guardian care of the most capable officials during their brief school life. We want a real system, vital in all its parts, not one elaborate on paper and defective in every point of practical development. A commissioner should sympathize with and stimulate the teachers. He should eradicate the barnacles that infest the profession. He should bring the intelligent and conscientious into associations for common improvement. He should disseminate the discoveries of science as applied to men, methods, and machinery. He should educate the people and teachers into active co-operation and intelligent sympathy, and thus bind them into a harmonious whole—a real system—all its elements under his supervision. This and nothing less is the measure of the man who should fill this important place. This principle of constant and patient inspection is inherent in any successful co-operation. Its presence and exercise mean life; its absence or want of exercise, death.

Importance of county supervision.—Superintendent Kiehle, of Minnesota: The importance of the office of county superintendent is my reason for so frequently recurring to it and for suggesting every possible expedient to increase its efficiency. Besides examining teachers and issuing all certificates, the superintendent is in position to promote capable teachers by his recommendations, and to exclude those incapable from responsible positions. He can in his visitations make valuable suggestions to teachers for the improvement of their instruction, and to school officers for the improvement of school facilities in building, apparatus, and libraries.

* * * Because, therefore, of the importance of this office, I must again call attention to the serious embarrassments which superintendents of counties suffer in being chosen at popular elections at times when all the agencies of party prejudice, personal enmities, and personal ambitions conspire to obscure a sound judgment and prevent a careful selection of an officer who is thoroughly competent to discharge the duties of the office. As a result, efficient superintendents are often displaced when most useful, and the best are greatly tempted to secure themselves in their positions by methods more political than educational. All these things detract from the character of the position, and often create artificial barriers to usefulness.

* * * The remaining suggestions I have to make are: (1) That the election of county superintendent be held at a time separate from the usual time of the election of other officers. (2) That some evidence of educational qualifications be required, as that of a first-grade certificate.

Influence of the county superintendent.—Territorial board of education of Dakota: It may be safely said that the county superintendent is the "master-wheel" in our system. It is a well-established pedagogical principle that "as the teacher is, so is the school." None the less true is our paraphrase of it: "As the county superintendent is, so are the schools" of his county. He affects them at every point. His influence in educational matters is coextensive with the limits of his county. The energetic, progressive, intelligent, sympathetic, educated county superintendent is a great blessing. The man of immoral habits, loose manners, and ignorant of his work is no less a curse.

Special need of supervision for county schools.—Superintendent Morgan, of West Virginia: Competent supervision is a matter of prime necessity in the management of our

public schools in order to secure the best results. The State has done but a part of its duty when provision has been made for the levy and collection of a school tax, the building of school-houses, and the employment of teachers. The qualified teacher should be placed first; next in importance comes competent supervision as factors vitally connected with the advancement of popular education.

The work of teaching suffers more than all other professions from indifference and incompetency. Men and women seek an entrance to the ranks of educational workers, not because of natural or acquired fitness, but because it is the best thing they can do for that particular time, intending, as the majority do, to enter other fields of labor as soon as opportunity offers itself. Fully twenty per cent. of the entire enrolment of teachers in this State leave the work each year. The statistics of other States show similar conditions. It also frequently happens that when two terms are taught in the same year, the two terms are taught by different teachers. It is unnecessary to remark upon the great waste and confusion that result from this condition of things—waste of time, effort, and money.

The importance of securing trained and competent supervision has become fully recognized in the management of all city public school systems, and this fact is so well understood that no expense is spared to secure the best talent and qualifications. A slight examination will show that the ungraded schools suffer more from frequent change of teachers and shorter terms of school than the graded schools of towns and cities, and yet the ungraded schools receive the least amount of supervisory care and direction, and generally that of a quality far inferior to that employed in graded schools. The ungraded schools stand in greater need of supervision than the graded schools, and the best method of securing supervision for these schools stands to-day as an unsolved problem. While it is not likely, for very obvious reasons, that the supervision of our ungraded schools can be brought to that degree of perfection and efficiency that now characterizes graded schools, yet the office of county superintendent can be so enlarged in scope and functions as to improve greatly the quality and amount of supervisory attention now given the ungraded schools.

County superintendency proves advantageous in Texas.—Superintendent Cooper, of Texas: The experiment of county superintendency which has been made during the past two years has demonstrated conclusively the superior efficiency of the system and justified the hopes of its friends. The school term has been essentially lengthened in nearly every county which has adopted superintendency, although the reduction in the per capita was expected to reduce the average term. The law providing for optional county superintendency was passed in the spring of 1887. * * * The average increase in the school term in the counties having adopted it is nearly half a month, although the apportionment was reduced 25 cents per capita. But the increase in length of school term is one of the least of the benefits which have followed the adoption of county superintendency in some of these counties. The teachers have been aroused, the schools have been classified, the interest of the people has been directly enlisted, and the children have been taught—not merely kept in school-houses. Effective supervision is essential to an efficient system of public schools, and opposition to county superintendency is either conscious or ignorant obstruction to economy, efficiency, and progress in our public schools.

School trustees should be progressive men.—Superintendent Logan, of Montana: The office of trustees is one of the most honorable and responsible positions connected with our schools, for to them are entrusted the honor, reputation, and welfare of the district, as well as guardianship of the youth. Such responsibilities require responsible men.

Boards of trustees should be composed of the representative men of every community. Public spirited, progressive, and intelligent citizens are and should be found by the office. It is important that such persons should be elected, as it is essential that only the best teachers should be employed.

XXII.—TEACHERS.

Necessity for teachers of high character.—Superintendent Hook, of Georgia: The teacher is, next to the minister of God, the most important figure moving on the stage of our secular and social life. He trains the young minds and hearts, and thus becomes the first lieutenant of the parents of every home in the land. His character should be without stain, his intelligence should be large, his temper and manners kind, courteous, and genial, and his bearing fully equal to the behests of the high and responsible duties imposed upon him.

Relation of teacher and pupil.—Superintendent Draper, of New York: The teacher has a legal right and is vested with legal power and authority to maintain order. If order is the first law of Heaven, it is none the less so of the school-room. It is of the first and highest importance. The law understands this and clothes the teacher with author-

ity adequate to secure it. If with this authority the teacher can not maintain order and exact an immediate and unhesitating obedience to his reasonable commands, he had better surrender his commission and go into some other business, and not be long about it. If he can not do it without brutality he had better abandon the attempt to do it at all, for the law will no longer sustain him in doing it that way. The law does not forbid corporal punishment, but the better opinion of the people is unquestionably adverse to it. Any severe infliction of it which amounts to brutality is an assault in the estimation of the law, for which the teacher is both civilly and criminally liable. I have sometimes thought that teachers are liable to be misled by the frequent use of the phrase *in loco parentis*. The teacher cannot, and he ought to know that he does not, stand in the exact relationship which the parent sustains to the child. That is impossible. It is impossible because nature is against it. The law will not permit a teacher to punish as severely as it will a parent, because the law is humane and recognizes the fact that the parent has in his breast a feeling for the child to which the teacher is probably a stranger. The law will guard more jealously the treatment of the teacher towards the child than it will that of the parent towards the child. The law clothes the teacher with power to exact and command obedience, but it expects that he will be of such a character, of such natural attainments, and of such qualifications and experience that he can exact and maintain obedience and order in the school-room without resorting to measures that are overharsh. The tendency of the age undoubtedly is to debar vicious and incorrigible children from the privileges of the schools or to provide for them in schools arranged for their separate use and with special reference to their care and discipline.

The teacher can require that pupils who pretend to come to school shall come with reasonable regularity. Can a child come to school but one day in a week, can he come only on alternate days, can he come an hour after the sessions have commenced, can he leave in the midst of daily sessions, only because the child knows no better and is allowed at home to follow his own inclination, or because the lawless parent wishes him to be so irregular? I answer no, with much confidence in my position. The school is free to all. It is the common right of all. Each must, however, use his privileges in a way which will not injure his neighbor. If you are to permit such irregularity and lawlessness in one case you must do it in all cases, and any such position would lead to the overthrow of the public school system. And so I say unhesitatingly that it is within the province and it is an essential part of the duty of those who are in charge of the public schools to exact prompt and regular attendance, so far as attendance can be prompt and regular, having in view the nature of the home circumstances which ought to be taken into consideration.

Influence of the teacher.—City Superintendent Shelley, of York, Pa.: The teacher must himself be the embodiment of what he would have his pupils become. His motives of action will inspire lofty motives in the young souls entrusted to his care; or, on the other hand, the low plane of the teacher's intellectual and moral life will be the certain prelude to the mental dearth and moral degradation of those under his instruction and influence. The teacher should prepare himself intelligently to direct the observations of pupils in the realm of nature as well as to lead them to appreciate and enjoy the good in literature. With teachers who find their highest enjoyment out of school hours in preparing themselves to do better and more thorough work the schools must prove a success.

Professional teachers should be employed.—Z. H. Brown, superintendent of city schools, Nashville, Tenn.: The services of most estimable young men have been secured as teachers, and had they remained they would have been valuable accessions to the corps, but their term of service has been too short. It is unfortunate for the school that these positions should be held by young men who are simply preparing themselves for some other profession rather than that of teaching. However promising they may be, and however well they may have stood in the college from which they bear a diploma, they are but novices in the business of teaching, and the school must suffer, at least till they acquire some professional experience. Such policy as will secure a greater length of service, and hence a greater degree of permanency, in these important positions will contribute much to the successful training of the high school pupils.

Teachers should be well paid.—J. M. Satterfield, school superintendent of Marion County, W. Va.: One great drawback in the profession of teaching is the low salaries paid. One who makes a success in teaching will also be successful in other callings; hence when teaching fails to compensate him he will seek employment more remunerative, and the consequence is, the inexperienced teacher is constantly taking the place of the experienced. Too many boys and girls—*children*—are trying to teach school. A teacher of twenty years' experience is offered no better pay in the common schools than one who has never taught, provided their *certificates of scholarship* happen to be of the same grade. A teacher should be paid according to what he does and not according to the amount he knows.

The success of a teacher determined in the school-room.—F. R. Brace, school superintendent of Camden County, N. J.: It is too true that many who enter the teacher's profession have only a slight conception of the teacher's work, and so fail in the outset. Some find out their unfitness and fall out of the ranks, and some remain to become tramp teachers, staying only a year or a part of a year in any school. It is also true that some of those who take the highest standing in our normal schools and colleges, and wear the highest honors, are complete failures in life. Some who are sent out to teach, clothed with the authority of a normal school diploma, are utterly unqualified to take charge of a school and teach the pupils, while some that have failed to get their diplomas have become first-class teachers.

Preparation of teachers.—President Sheib, State Normal School, Louisiana: The teacher must have completed her preparation when she enters the class-room. She is there to instruct and train, and the object and means by which it is to be attained must have been considered beforehand.

Moral character of teachers.—President Sheib, State Normal School, Louisiana: It is the man or the woman, not the method or the disciplinarian, that teaches the most serious lessons which the child has to learn. It is this teacher who appears before the class at the same moment as a guardian, as instructor, as friend, as guide, and as the model man or woman whose truth, sincerity, and purity are worthy of imitation.

Education has for its object the moral being as well as the intellectual one. * * *

The very idea of benevolence and justice revolts against a system which wilfully, or as a result of criminal negligence, entrusts the conscience and the character of the child to the care of a teacher whose mind is poisoned and whose heart is bad. This evil communication is all the more dangerous because to the child the teacher is a guide and a model.

Young persons should not be employed.—Town Superintendent Matthews, of Cornwall, Vt.: I think that the law ought to require that all teachers should be at least eighteen years of age. There are too many young teachers who not only have had no experience in teaching but do not know how to govern themselves, much less their schools.

Town Superintendent Guild, of Enosburg, Vt.: I think there is need of a law limiting the age at which one can secure a certificate for teaching. In some schools there is a strong tendency to hire young teachers in order to save a little in wages.

Older teachers would have a maturer judgment for the work, would demand higher wages, and the larger wages would lead the people to demand better qualifications, so that the benefit arising from such a law would be for both teachers and scholars.

XXIII.—TEMPERANCE INSTRUCTION.

Temperance instruction in Minnesota.—Superintendent Kiehle, of Minnesota: The reports from the counties indicate a purpose to honestly execute the law. The subject is doubtless as well taught as others are. The children are easily interested, and I have no doubt will derive much permanent good through the skill and example of good teachers. Nothing should be left undone that will fix in the minds of our youth a sense of the folly and danger of the use of alcoholic beverages and a resolution to entirely abstain from their use.

No measure can better promote temperance and morality.—Superintendent Estabrook, of Michigan: It is certain no measure can be made more effectual for the advancement of the cause of temperance and morality than thorough, faithful, and honest instruction given in our public schools to all pupils in regard to the effects of alcohol and narcotics on the body and soul. * * * I believe in teaching temperance, but not in forcing text-books upon our grades where they can not be used.

Temperance instruction gaining favor.—Superintendent Leech, of Cambria County, Pa.: The subject of physiology and hygiene is growing in the favor of teachers, pupils, and citizens. Our teachers are making rapid progress in the study of the subject. However, in many schools it was but imperfectly taught, and in many of these the law was barely complied with, if at all. The unreasonable prejudice against this new branch in many places is disappearing, but still it exists, and in some cases with the teachers, too. Where it has been properly taught the feeling against this branch, where it existed, is fast disappearing. Can we place too much importance on health of body? What shall it profit us if we gain the whole field of knowledge and lose our own health?

How can any intelligent parent be opposed to this subject when he once knows that its object is to make better men and women, physically and morally, of the boys and girls who shall go out from our schools, and to warn them against the evils of intemperance and instil into their minds a love for temperance in all things. This subject is destined to be one of the most useful as well as one of the most popular studies of our common schools.

XXIV.—TEXT-BOOKS.

Free text-books advantageous.—Superintendent Chapman, of New Jersey: No appropriation of an equal sum can secure greater advantages to the schools than that which is required to furnish the text-books. The district can purchase at a lower price than the individual, and the same book, with proper care, may serve half a dozen pupils in succession instead of one. If the books are so furnished a thorough grading is made possible, and much inconvenience and delay are avoided.

Free text-books authorized in Pennsylvania.—Superintendent Higbee, of Pennsylvania: The grant of authority to school directors to furnish free text-books for their schools is more and more used, and thus far such action has given full satisfaction, not only in our large cities, but in many of our rural districts. It is found to be more economical, saving all loss to parents through change of text-books, and making it possible to commence the work of teaching on the first day of school, each scholar being provided with his books at once, without any annoying delay until parents can purchase. It adds greatly to the enrolment of pupils, for many parents who through poverty or indifference have failed to supply books, and thus have kept their children from attendance, now send them. In Massachusetts the law is compulsory. With us authority only is given, and the directors are to use their own discretion in the matter. The fact, therefore, that the practice of furnishing text-books free steadily gains ground with us is an argument in its favor.

Cost of text-books when furnished free.—H. W. Halliwell, secretary of the board of controllers of public schools of Philadelphia: The cost of books and other supplies for many years has ranged from 80 cents to \$1 per pupil.

Free text-books in New Jersey.—Superintendent Apgar, of New Jersey: Nearly all our cities furnish text-books free of cost to the children. We have fifteen hundred school districts in the State outside the cities, and four hundred of these furnish free text-books. It is my endeavor to get all the districts in the State to adopt the policy which now prevails in so many.

In New York City.—Superintendent Jasper, of New York City: The board of education furnishes all pupils in the public schools with books and school supplies free of expense, and this merits the hearty approval of the citizens of New York City.

In Newark, N. J.—Superintendent Barringer, of Newark, N. J.: We have furnished our pupils with books, slate-pencils, chalk, etc., for many years. It has cost on an average about 45 cents a year for each pupil. We like the plan very much. Its advantages are many. I will name a few of them: Cheapness, convenience, uniformity, complete control of course of study, and removal of all excuses for non-performance of work by pupils.

Text-books furnished free for many years in Jersey City.—City Superintendent Barton, of Jersey City: For many years free text-books have been furnished to the pupils in the public schools of this city. This plan has proven very satisfactory. The cost per pupil has varied from 50 cents to \$1.25 per year for books and stationery.

Free text-books in Woonsocket, R. I.—City Superintendent Thomas, of Woonsocket, R. I.: It is found that the average cost of text-books for the past four years has been 66 cents per pupil. We have never lost a book except by the usual process of wear and tear. I do not know of a single disadvantage connected with the plan. The system works perfectly in every respect, and none of us would give it up.

Want of uniformity prevents good teaching.—Superintendent Cooper, of Texas: In many schools good teaching is a physical impossibility, on account of the variety of text-books which parents desire and trustees allow to be used.

Why school-books should be free.—Superintendent Newell, of Maryland: Why should not the books needed in our common schools be free to the pupils? We have free school-houses, free teachers, free stoves, free fuel, free desks, free black-boards, free wall maps; why not also free school-books? There was a time when none of these things were free, and some were non-existent. The teacher was paid so much a week and "boarded around." The writer has seen, when he was a boy, a band of urchins trooping to the school-house, each with his contribution to the fuel of the day under his arm. He has also in his capacity of teacher had a pupil come to him with his desk carried behind him by a colored man, because "such was the old custom," as his father explained. Now all is free except the school-books, and that tax remains as one of the relics of barbarism.

But why should school-books be free?

(1) Because otherwise the schools are not really *free*. If any money consideration is necessary to the enjoyment of school privileges, the name of "free school" is a mockery.

(2) Because the cost of books keeps some children out of school, and these perhaps the very children who need schooling the most. The parents are too poor to buy books and too proud to be willing to have their children enter as paupers.

(3) Because the book tax introduces invidious class distinctions. Some children pay for their books; others are classed as "indigent" and do not pay. Here is a line of

separation that should not be tolerated in any American school. The pupils should meet in school on the same level, as they will afterwards do at the polls when they come to exercise the right of suffrage.

(4) Because the work of the school can not be carried on promptly and efficiently unless books can be furnished by the teacher on the day they are needed. A teacher wishes to begin a class in grammar. He tells them to bring the proper text-book on the next Monday. Monday comes and only three pupils out of twelve have the book. The opening is postponed till the next day. Next day brings four books and the opening is postponed till next week. Next week sees half the class furnished with books and the teacher debates with himself whether to give up the class or to go on with one-half the members, or to give them another week to procure books. This is no fancy sketch, but a photograph from the life.

(5) Because the want of free text-books enables parents to nullify a law of the State. In most of the States a law has been passed requiring "temperance physiology" to be taught in all public schools, "with the use of text-books as other branches are taught." But a parent by simply refusing or neglecting to purchase the text-book can virtually repeal the law, so far as his child is concerned, and set at naught the will of the majority of his fellow-citizens expressed under constitutional forms.

(6) Because free books are on the whole the cheapest. The State can buy at a much lower rate than a private individual. Nearly one-half of the present money expended on books might be saved by buying at wholesale; and the additional State tax would hardly be felt by the majority of those who patronize the schools.

(7) Because those communities that have tried the experiment of "free books" are perfectly satisfied and could not be induced to return to the old plan.

(8) Because the arguments used against free books are the very same as have been urged and are urged against free schools. "People do not value properly what they have not paid for." If I had a valuable horse given me by a friend should I value him the less because he cost me nothing? Do we think the less of a broad and smooth highway because there is no toll-gate on it?

Lastly, because free books would add ten per cent. to the number of scholars, and twenty-five per cent. to the efficiency of the schools.

Objections to furnishing free text-books to the poor only.—Superintendent Patterson, of New Hampshire: The district furnishes free school-houses, free furniture, free apparatus, and free teachers; why not free text-books as well, and open the schools to the poorest? The patriotic purpose of the public school is universal education, but the object cannot be reached if we throw the expense of text-books upon those who have nothing with which to buy. It is like offering the milk and honey of salvation, which the poor are invited to "buy without money and without price," in marble cathedrals and at golden altars, where only the rich can bow. Experience shows that from ten to twenty per cent. of the school population is excluded by this burden.

But we are told that books are now free to the poor. Yes, and so is the county farm; but they decline your charity, and I am glad of it. I honor the American citizen whose self-respect and parental affection will not allow his child to be stigmatized as a pauper in the knowledge of his companions. The sense of inferiority blights the gems of nobility and dries up the joy of youth at its source. A child should not be punished for its poverty in a democratic system of education. To humiliate scholars at every grade of their progress is a poor way to build up a manly and womanly character, fitted for the responsibilities of a free citizenship. The example is as hurtful, also, to the children of the rich as to those of the poor. It begets in them arrogance, conceit, and an impression of superiority unfavorable to the idea that character is to be measured by intellectual and moral standards, rather than by accidental social distinctions. Compulsory education and free text-books should stand together in a system of school laws.

Free text-books recommended.—City Superintendent Emerson, of Newton, Mass.: The following are some of the advantages of the system of free text-books:

(1) It effects a saving of time. Under the system of individual purchases, a delay of a week, and even more, is not unusual at the opening of the school year. This loss of time involves a large loss of money. Allow me, as a matter of convenience, to illustrate from the schools under my supervision. The city provides instruction for about four thousand pupils. The cost of the schools, exclusive of the interest on the money invested in land and school buildings, is, in round numbers, five hundred dollars a day, reckoning two hundred school days to the year. Viewed from this point, a week's delay becomes a matter of grave importance. With free text-books the work of the schools may begin at once. There need not be a delay of a single hour.

(2) It secures better classification. Not only is the long delay incident to the organizing of the classes prevented, but it enables the teacher to make a better classification of his school. The pupil is examined, his qualifications considered, and then suitable books are given. Formerly parents bought larger books for the older children, and re-

fused to buy smaller books for younger ones. Thus many pupils suffered from want of proper classification. This evil is felt most keenly in country schools. * * *

(3) It effects a saving of expense. First, the cost of the books is less. The pupils pay retail prices or a considerable advance upon wholesale prices; the city or town buys at lowest wholesale prices. On account of the exceptionally large discount allowed on text-books, and other school supplies, the difference between these prices is considerable, sometimes amounting to from twenty-five to fifty per cent. of the retail price. Again, free text-books are used until they are worn out. In the case of individual ownership, they are often thrown aside after being used for a few months or possibly a year.

(4) It cultivates in the pupil the habit of respect for public property. The pupil is required to use the books with care and to return them without spot or defacement. * * *

(5) It secures uniformity of text-books. * * *

(6) It secures to the schools better books and appliances, and a larger variety of them, and thus leads the way to greater flexibility in the work of the school-room. * * *

(7) It increases school attendance and removes caste distinctions. The purchase of books for a large family of children imposes a heavy tax upon the parents. In many instances this tax becomes a greater burden than the parents are willing or able to bear, and the children are taken out of school at an early age or are compelled to wear the badge of pauperism by having their books supplied at the public expense.

Laws for uniformity of text-books condemned.—City Superintendent Bettison, of New Orleans: Is not uniformity an evil rather than a benefit? The teacher who has used only one grammar or one arithmetic is not equal to the one who has used several. Every intelligent teacher knows that it is decidedly to a pupil's advantage to change from one author to another in pursuing the same study. Even when the books are good, change is sometimes beneficial; but when a bad selection has been made, and the teachers throughout a State are indignant because they are compelled to use an inferior or worthless book, how galling is the legal necessity of continuing the wrong for four years.

All educators know that when books are not supported by authority, but are allowed to stand upon their own merits, the unworthy ones are short-lived. An intellectual, conscientious teacher would scorn to recommend a text-book that he regards as inferior; and if an occasional mistake should be made by a local board in the limited introduction of a defective or badly arranged book, it would not be a serious, long-continued, and multitudinous blunder like the legal four-year infliction of an unsuitable or worthless work under the present law. Indeed, it is very difficult for even a good teacher to form a correct estimate of a school-book until he has given it a year's trial in the school-room. How much less the probability of a perfect selection by a body of men who seldom enter a school-room, and who are not, as a rule, chosen with a special reference to their familiarity with the improved modern systems of education. No new book should be introduced without having undergone the closest investigation by a body of trained teachers, who should, if possible, hold meetings for its discussion, and use it experimentally in their classes. * * * The injury is most keenly felt in the cities where there are well-organized systems of schools whose teachers and officers well know their wants.

XXV.—WHAT SHALL BE TAUGHT IN THE PUBLIC SCHOOLS?

Public schools should not attempt too much.—Superintendent Estabrook, of Michigan: In our larger cities industrial schools may be established, where those who cannot be trained at home may have an opportunity afforded for acquiring practice in the use of tools. Technical schools ought to be organized in every State, in which pupils who have finished the disciplinary studies may have the most ample opportunity for acquiring manual skill.

But our schools will fail of accomplishing their object if they are burdened and confused by attempts to teach that which it is not necessary for all to know, or to give training which is not needful to all. The common schools are necessary for the perpetuity and prosperity of the State. The special schools are for the advantage and prosperity of the individual.

Importance of vocal culture and physical training.—Superintendent Williams, of Nashua, N. H.: There is no more important branch of instruction in our public schools than that which tends to the proper development of the vocal organs, and to the correction of bad habits in tone and quality of voice. Good reading cannot be attained, except in rare individual cases, unless considerable attention is given to voice culture from the very lowest grade. At first it may be a mere imitation on the part of the child, as indeed it is, but even in this stage of the child's progress the teacher's correct tone and accent, with distinct enunciation, is a powerful influence for culture. This fact is especially noticeable in schools composed largely of children of foreign parentage, who have heard

nothing but their native tongue at home, and the poorest of broken English among their playmates. Imitation is then the only method which the teacher can use to correct their faults in reading and speaking. She must be to them an example, a copy, a standard, which they are to strive to reach. * * *

Physical training, or gymnastics, as it is commonly called, is of no less importance, if we take into account the fact that the mind cannot act with the best results unless sustained by a healthy body. "A sound mind in a sound body" is a truism that needs to be remembered and heeded with special care during the growing period of the child. If I may be permitted to quote another, "We are blameworthy if, in this age of lavish education, we continue to yoke together active brains and inert bodies, to increase the load upon our shoulders and neglect the means for carrying it." If learning is to be acquired at the sacrifice of health, it would be better not to acquire it. But there is no need of losing health in the pursuit of knowledge. To counteract such a tendency it is necessary that the pupil should maintain correct and regular habits of reasonable recreation out of school, and that physical training be made a part of every-day work in school. Each teacher should set apart a few minutes each day for this purpose, and the other work will not suffer on account of it, but will rather be benefited by it.

The policy of a school not to be determined by a pupil nor his parents.—Superintendent Draper, of New York: The teacher must classify and arrange the school. He must, upon inquiry and examination, determine what studies the pupil should pursue and in what classes he ought to recite. The child must accept the arrangement of the school. He must not only submit to the discipline of the school, but he must pursue the course of instruction outlined for him. The parent can not dictate the policy of the public school towards his own child. I assert the principle broadly and squarely, that when the child is brought to the door of the school-house, and is turned over to the public school system for education, that system is expected to know better what he needs, and better how to do for him what he needs, than the parent who brings him there. * * * He must take such studies, he must observe the rules in such manner, as the public school authorities shall say. Any other rule is antagonistic to the harmony and efficiency of the school system.

* * * * *

The teacher is in no wise subject to the direction or the restraint of the child's parent. Nothing is more common than the interference of parents with the discipline and the course of procedure in the public schools. They become dissatisfied generally, or angry at matters of small importance if they relate to other children, but which are magnified into matters of great moment when they relate to their own. They have no right to expect that they can change the whole policy of the schools so that it shall accord with their personal ideas. There is no sense in beginning a fight upon the teacher because of dissatisfaction with the proceedings of the school. Suggestions should be always welcome. Good ones should be put to good use. But the idea that the parent can control the teacher, even in reference to his own child, must be repudiated. The teacher is not responsible to the parent, but the school system, and the course of the school system is to be determined, not by any one irate individual, but in the usual ways for determining all questions in this country, either through appeal to constituted authority, or by the voting power of a majority of the people. The parent may exercise his influence and his vote to modify the system or change the teacher, but he can not be allowed to manage the school.

If there is any one proposition which I would emphasize, any one thing which I desire everybody connected with the public school system to observe, it is that the power of managing and directing the public schools must be kept with the public school authorities; that it is for them to determine the policy, as it is for them to direct the procedure, of the schools. When they make serious mistakes, their mistakes will be corrected through the proper channels and by the legitimate power of the people, but until they do make mistakes, and until their mistakes are corrected in the proper way, they must be clothed by law with the authority which always goes with responsibility.

Scope of the public schools.—Superintendent Cooper, of Texas: Each public school maintained by the State should give instruction in the subjects which are essential to the formation of good citizenship. For this end, instruction in the elementary branches, if thorough and effective, is sufficient. Other subjects should in general be excluded from ungraded country schools. It would be desirable, if it could be done without too great inconvenience, to authorize trustees of the districts in each justice's precinct to provide for higher instruction in some one school situated near the centre of the precinct, which might be attended by the children within the scholastic age who had passed beyond the subjects which could be advantageously taught in the ungraded country schools. The instruction of two or three pupils in higher algebra, geometry, trigonometry, Latin, Greek, or other subjects than those mentioned before as suitable for ungraded schools requires so much time from the teacher, that these subjects cannot be well taught with-

out detriment to the welfare of the other pupils, who constitute four-fifths of the children taught in the schools. But the educational needs of these few children in each school district, who have passed beyond the elementary subjects and are still within the scholastic age, should be provided for. I am of the opinion that this can not be done effectually without detriment to the interests of the large majority of children in any other way than the one suggested, namely, the organization in each justice's precinct, or any convenient subdivision of the county, of one school which should be authorized to give instruction in all subjects or grades below the high school.

There should be in each county a high school, in which any one within the scholastic age who desired and had the ability to go beyond the course of instruction in primary and grammar schools might fit themselves for active life or for entrance into a university.

The study of civil government recommended.—Superintendent Hoitt, of California: The study of our civil government, including the National Government, and the important points in our State, county, and city governments, should receive more attention in our public schools.

Pupils should be required to memorize the most important portions of the Constitution, and made to understand what they memorize. Such a course will be a very potent method of preparing them for the duties of citizenship.

Music introduced into the schools.—From the Report of the School Committee of Pembroke, N. H.: Music from chart work was introduced into our schools the first of the second term, and we were pleased to note the interest which some of our teachers took in this work and the success which crowned their efforts. If there be any skeptics who do not believe that music can be taught without a professional instructor, they should have visited our village schools at their closing exercises. We know now, if we were in doubt before, that it can be taught with great success and profit. * * * We have introduced music, not to trespass upon the time of the school, but simply as an exercise to be conducted for a few minutes each day, to rest the weary workers and give them renewed zeal and energy for the labors before them.

XXVI.—WORD-METHOD OF TEACHING READING.

The word-method of teaching reading commended.—Superintendent Morss, of Portsmouth, N. H.: More than ten years ago the board of instruction voted that the word-method of teaching reading should be employed. This innovation, as people call it, is not a new idea at all. In 1841 Horace Mann, in a public address, said: "The plan of teaching words first has succeeded wherever it has been fairly tried; and I have no doubt that it will soon wholly supersede the old and doleful method of beginning with the alphabet." Prussia, in 1872, prohibited by law teaching to read by beginning with the alphabet. No effort is made to teach the letters till the child knows how to read, as the names of the letters give no clue to the sound of the combination of letters that makes the word. The reasons for this method are so familiar to all educators that it would be superfluous to state them.

CHAPTER VI.

ALASKA.

Report of the President of the Territorial Board of Education—Letter Transmitting Report of the General Agent of Education—Report of the General Agent—Number and General Condition of the Schools of Alaska: (1) Public Schools; (2) Contract Schools; (3) Indian Bureau Schools; (4) Other Schools—Regulations Prescribed by the Territorial Board: (1) Memorandum of its Organization; (2) Rules for the Government of the Public Schools; (3) Rules for Obligatory Attendance—School Census—The General Agent's Duties—Additional Information: (1) Visit of the Commissioner of Education; (2) How the Rules for Compulsory Attendance Operated; (3) The Exodus to Metlakahla; (4) School-Houses; (5) Boarding and Industrial Schools; (6) Agricultural School; (7) Permanent School Fund.

REPORT OF THE PRESIDENT OF THE TERRITORIAL BOARD OF EDUCATION.

TERRITORIAL BOARD OF EDUCATION,

Sitka, Alaska, February 6, 1889.

SIR: On September 15, 1888, Dr. Sheldon Jackson, general agent for Alaska, made a report in writing concerning the public schools in the district, and laid the same before the board as then constituted, the members present being the Acting Governor, Dr. Jackson, and myself. I had only been in the district a few days, and was compelled to accept the statements of the report *pro forma*. Under those circumstances the report was approved and forwarded to your office. Subsequently, after the return of Governor Swineford, and at a meeting of the newly constituted board, consisting of five members, upon the motion of Governor Swineford, based upon a number of material inaccuracies in the report, it was recalled.

The only meeting of the board after the receipt of the report was on the 25th of January, when it declined to enter into the subject further than to instruct me to draw up a report of the public schools in the district for the year ending June 30, 1888.

Dr. Jackson is not in the district to aid me in that duty. I was not a member of the board during any part of that fiscal year. By reason of the absence of Dr. Jackson, I have not access to any of the official records of the board for that period to aid me.

I beg leave to make the following imperfect report:

SCHOOLS OPEN.

Unga.....	1	Metlakahla.....	1
Afognak.....	1	Sitka.....	2
Kodiak.....	1	Ind. Bu., Sitka.....	1
Douglass City.....	1	Bethel.....	1
Fort Wrangell.....	1	Carmel.....	1
Haines.....	1	Hoonah.....	1
Howkan.....	1		
Juneau.....	2	Total.....	18
Killsnoo.....	1		
Klawack.....	1	Pupils enrolled.....	1,435

In addition to the foregoing public schools for whites and natives there is at Sitka an Indian school, under the auspices of the Greco-Russian Church, maintained by the Holy Synod in Russia, which employs two teachers, and has an enrolment of fifty. English is taught in this school, and in the visits I made thereto I found it one of the most flourishing ones in the district.

The Sisters of Charity also maintain a hospital and a school at Juneau. They are struggling against poverty and isolation, but are doing good in an unostentatious way. They have, however, the cordial co-operation of the hardy mining population at Juneau.

Rev. Adolf Lydell also established, under the auspices of the Free Mission Society of Sweden, a mission school near Tukulat, and erected a log school-house.

The Indian industrial school at Sitka, included in the total of eighteen schools heretofore summarized, had an enrolment of one hundred and eighty-six pupils. The average number of instructors, including nurse at the hospital attached thereto, was twelve.

There were very few facilities, and are yet few, for industrial instruction, as distinguished from general education, for the boys at this school. They have a blacksmith-shop with one set of tools. There is no demand here for any such work to give employment for boys while undergoing industrial instruction. The carpenter-shop is also small and only a few boys can be instructed in and about it. The printing-office is only a moderate affair, and not equal to the capacity of training more than three or four in that art. The shoe-shop is of the same modest proportions. The fact is that, as the institution is now constituted in facilities and means of industrial education, there is practically no labor for the boys beyond the simplest kind of manual labor, such as sawing wood for the consumption of the school and the buildings attached.

The principal, Mr. Kelley, and the teachers and instructors have been doing all that can possibly be done with the means of industrial education which they have had within reach. I am clearly of the opinion that before the industrial features of this school can be realized that that department must be reorganized by a careful selection of such occupations as will be useful to this peculiar people when they leave the school to go out into the world to earn a living for themselves; and also when the occupations are selected in which to train them that the facilities of competent and efficient training be amply provided. This is not the case now as to the boys, but it is not the fault of those in management. It has been, so far, the want of money. There is not even a fish-cannery here where they might be put to training. The means of giving the girls some kind of an education that will fit them for wives and mothers are more ample, and are far more useful than anything in an industrial way that has been provided for the boys. Looking at the experience and results at Metlakatla I am satisfied that the most practical thing to be done is the erection of a small steam saw-mill and a planing-mill of moderate capacity for the making of packing-cases for fish-canneries. This is an industry natural to the country and demanded by one of the two other great industries of this district. In view of the fact that the Government is now dealing liberally by the way of appropriations to this school, I suggest that a plan of industrial reorganization be carefully matured, one that is really adapted to the circumstances and natural surroundings of the natives.

I attach hereto an abstract of the monthly enrolment, marked A, and one of classification of studies, marked B.

My rapidly increasing judicial duties since I arrived in Alaska, and duties of that character since the order of the board mentioned in the first part hereof, have prevented me from making any other in accordance therewith than this now submitted.

I hope to supplement it in some suggestions hereafter in regard to the means of increasing the efficiency of the industrial school here.

Yours, very respectfully,

JNO. H. KEATLEY,
President.

Hon. N. H. R. DAWSON,
Commissioner of Education, Washington, D. C.

LETTER TRANSMITTING THE REPORT OF THE GENERAL AGENT OF EDUCATION.

TERRITORIAL BOARD OF EDUCATION,
Sitka, Alaska, September 15, 1888.

SIR: The Territorial board of education in Alaska has the honor of transmitting to you the annual report for 1887-88 of the general agent of education in Alaska, with its approval of the recommendations contained except as follows, to wit, the recommendations for school-houses at Kodiak and Afognak, and for industrial boarding schools at Kodiak and Unalaska. As it is expected the Governor, who is now visiting Western Alaska, will have more definite information on those items, they were withheld for future action at the request of the general agent himself.

The following recommendations of the report were taken up seriatim, discussed, and adopted unanimously:

(1) The Commissioner of Education is recommended to allow the Episcopal Board of Missions for the school at Anvik, and the Moravian Board of Missions for the schools at Bethel and Carmel, compensation for 1887-88, proportioned to the time taught and the number of pupils.

(2) That school-houses be erected at Douglass City and Metlakatla.

(3) That the Board offer to co-operate with the Commissioner of Agriculture in an effort to establish an experimental farm in connection with the Sitka Industrial School.

(4) That the Commissioner of Education allow from the school fund eight dollars per month towards the wages of native policemen to enforce the regular attendance of children at school.

(5) That legislation be asked from Congress to secure a permanent school fund for Alaska.

(6) That local school committees be appointed wherever practicable.

(7) That the yard of the Sitka School No. 1 be graded and seeded down to grass, and that gutters be placed around the eaves of the school-house.

Present at the meeting, Acting Governor H. E. Haydon, Judge Keatley, and Dr. Jackson.

By order of the Board.

JNO. H. KEATLEY,
President.
SHELDON JACKSON,
Secretary.

Hon. N. H. R. DAWSON,
U. S. Commissioner of Education.

REPORT OF THE GENERAL AGENT TO THE TERRITORIAL BOARD.

SITKA, ALASKA, June 30, 1888.

To the TERRITORIAL BOARD OF EDUCATION, *Sitka, Alaska*:

GENTLEMEN: In compliance with the regulations governing the public schools and school officers of Alaska I beg to submit the following as the annual report of the general agent of education:

A.—NUMBER AND GENERAL CONDITION OF THE SCHOOLS IN ALASKA.

Alaska has fifteen schools (with 1,261 pupils), supported in whole or in part by the Government; fifteen parochial schools of the Russian Church, with 300 pupils, one being in Sitka; one Presbyterian mission school, at Hoonah, with 136 pupils; two Moravian schools, at Bethel and Carmel, with 33 pupils; one Roman Catholic school, at Juneau; one Episcopal school, at Anvik; two Swedish mission schools, at Unalaklik and Yakutat, and the two schools of the Alaska Commercial Company, with 82 pupils; making a total of thirty-nine schools and over 1,800 pupils.

I. PUBLIC SCHOOLS.

1. *Unalaska District.*

Unga (Public).—Prof. John H. Carr, teacher; enrolment 25. Owing to sickness in his family Mr. Carr closed the school the 1st of April and returned to the States. Prof. John A. Tuck, of Long Island, New York, was appointed in his place.

The citizens of Unga are the banner people of Alaska in their interest in the education of their children. During October, 1887, they erected and paid for a neat and substantial school-house 20 by 24 feet in size. This is the first community in Alaska to erect their own school building. Their public spirit deserves honorable mention.

2. *Kodiak District.*

To the eastward of the Unalaska District comes that of Kodiak with its two schools of Kodiak and Afognak.

Kodiak (public).—Prof. W. E. Roscoe, teacher; enrolment 81. In addition to the public school for the children Professor and Mrs. Roscoe hold an evening school for adults who desire to learn English.

Mr. Roscoe reports that the pupils have made much greater progress this year than last. This has particularly been the case in geography, temperance hygiene, and the use of the English language. To this latter special prominence is given, regular talking exercises being had each day. The use of the Russian language in the school is prohibited. Kodiak is one of the leading centers of the Territory and ought to have a good school building.

Afognak (public).—Rev. James A. Wirth, teacher; enrolment 24. Professor Wirth reports that the two great hinderances he meets in his work are the want of appreciation on

the part of the parents as to the value of an education, and the impossibility of crowding more than twenty-four pupils into the small, inconvenient, and uncomfortable room that he is compelled to use for the school. Some of the children are making good progress in reading, writing, drawing, and singing. In arithmetic they seem very slow, but in any study not requiring abstract thought make rapid progress. This place greatly needs a comfortable school-house situated midway between the creole and native settlements.

For reasons mentioned hereafter I have been unable to visit any of these schools for two years past.

3. Sitka District.

We come now to the Sitka district, with its sixteen schools, including a Swedish mission at Yakutat, a Roman Catholic school at Juneau, and a Russian Church school at Sitka.

Douglas City (public).—This school was commenced under the auspices of the Society of Friends by Messrs. E. W. Weesner and W. H. Baugham, in the summer of 1887. In February, 1888, Mr. Baugham returned to the States and his place was supplied by Mr. and Mrs. S. R. Moon. Mrs. Moon was in charge of the school after her arrival. Enrolment, 67.

Concerning the pupils Mrs. Moon, who had been a teacher for years among the Indians of Kansas and the Indian Territory, writes: "I have never worked among a more intelligent people of a heathen character than the natives of Alaska. The girls are needing our special care. They are intelligent; have fine features. If we would take these girls at five years of age and train them properly they would make the best of house-keepers.

Douglas City being in the immediate vicinity of the most extensive gold mining interests in Alaska should have a suitable school building.

Fort Wrangell (public).—Miss Lyda L. McAvoy, teacher. Enrolment, 106. This is the oldest and most advanced day school in the Territory.

During the past year, through the energy of Hon. James Sheakley, United States commissioner, and with the approval of the honorable Commissioner of Education, the old building occupied by the school has been overhauled, repaired, repainted, and fitted up in a comfortable manner.

Haines (public).—Dr. F. F. White, teacher. Enrolment, 140. This school is one hundred miles from a post-office or civil officials. There being no way provided for enforcing regular attendance, the average was low for so many children.

Those that did attend manifested much interest. The teacher reports that he never knew children prouder or better satisfied than when pupils who had previously known nothing of English could sing a few verses or read a lesson nicely from their first reader; that just as soon as they were able to distinguish one letter from another on chart or book, the puzzled look gave way to smiles of delight, and from thenceforward rapid strides were made in first, second, and third readers.

✶ The school was somewhat interfered with during the winter by witchcraft persecutions.

In the spring, when the people left their homes to pack supplies for the Yukon miners over the wild and dangerous mountain passes that guard the interior from the coast, taking their families with them, Dr. White and his wife, with great self-denial, followed the people to their temporary home at Tyra inlet and continued school until the 5th of June, when, an outbreak occurring by which a leading chief lost his life, the excitement was so great that it was thought best to close the school for the summer vacation.

Howkan (public).—Miss Clara A. Gould, teacher. Enrolment, 110. This is one of the successful schools of the country and deserves the new school building which it is to have the present summer.

Juneau (public) School No. 1 (whites and creoles).—George B. Johnston, teacher, reports a total enrolment of only 25 in the largest American settlement in the Territory. The conduct of the school was the least satisfactory of any under my jurisdiction.

Juneau (public) School No. 2 (natives).—Miss Henrietta Jensen, teacher. Enrolment, 67. The only pupils in this school that were regular in their attendance were those from the Presbyterian Mission Home, in charge of Rev. E. S. Willard.

Miss Jensen reports concerning them: "Many of the scholars, who, when the term began last September, could not speak a word of English, can now not only speak but read and write it. They can also spell correctly, and are beginning in the first principles of arithmetic. To the casual observer perhaps nothing seems more absurd than to attempt by any process to enlighten the clouded intellect of these benighted people. Indeed, the most squalid street Arabs might be considered a thousand times more desirable as pupils.

"But a few days' work among and for them convinces the teacher that she has not a boisterous, uncontrollable lot of children, but as much the opposite as it is possible to imagine. Children who habitually refrain from playing during intermission that they

may learn some lesson or how to do some fancy work are not to be classed with the wild, wayward, or vicious. Boys who, when their regular lessons are done, are continually designing and drawing cannot be said to be entirely devoid of talent worthy of cultivation. While the development must be slow in most cases, there are a few that could compare favorably with white children of the same age. Their abnormal development of the faculty of form gives them an inestimable advantage over their more favored pale-face brothers in acquiring the art of writing and drawing. Their minds act very slowly, but they make up in tenacity of purpose what they lack in aptness."

During this present season a pleasant and commodious school building has been erected for the use of both schools.

Killisnoo (public).—Miss May Ransom, teacher. Enrolment, 44. The teacher reports a successful year. The comfort of the school has been greatly increased by the possession of a suitable school building, which was the first one in Alaska erected by the Government.

Klawack (public).—Prof. L. W. Currie, teacher. Enrolment, 81. The school has labored under the disadvantage of an uncomfortable building; also distance from any protection of law.

Drunkenness and witchcraft have kept the community in a constant turmoil. During the winter four native men (Hauegahs) forced their way into the house of the teacher, and charging a native girl, whom he was sheltering in his family, with being a witch, attempted to carry her off by force in order to torture her. Mr. Currie, at the risk of his life, drove them off and saved the girl. Two months later the same men, re-enforced by a large party of the worst element of the Hydah, made another attempt to secure the girl. They sang their war song and brandished their knives, but were foiled in securing the girl. Failing in that they so far intimidated her brother as to compel him to pay a ransom in blankets, the currency of the people.

Notwithstanding these drawbacks the school made good progress.

Metlakahla (public).—Mr. William Duncan, teacher. Enrolment, 170, with an average attendance during January, 1888, of 159.

For years the most successful native mission on the Pacific Coast has been at Metlakahla, British Columbia, under the leadership of Mr. William Duncan. It was an object lesson studied by the natives far and near, and an example that many desired to copy.

Sitka (Public) School No. 1 (whites and creoles).—Miss Margaret Powell, teacher. Enrolment, 60. During the year a substantial and pleasant school-house has been erected, and as a result the teacher reports that the progress of the children has doubled.

Sitka (Public) School No. 2 (native).—Miss Virginia Pakle, teacher. Enrolment, 71. This school, like so many others, has labored under the great disadvantage of an unsuitable and uncomfortable building. For want of better it occupied an old, rotten, condemned log building, formerly used as a native market place. As the honorable Commissioner of Education has authorized the erection of a new building, another year will see the school in better shape. With regard to progress the teacher reports it satisfactory.

II.—CONTRACT SCHOOLS.

Owing to the difficulty of conducting schools on the coast of Behring Sea, where there is mail communication but once or twice a year, a small compensation was allowed to the schools on the Kuskokwim and Nushagak Rivers, established and conducted by the Moravians.

Bethel, Kuskokwim River (public).—Mr. John H. Killbuck, teacher. Enrolment, 17. In the spring of 1887 the Rev. W. H. Weinland, who had been in charge of the school, resigned on account of health and returned to the States. His place was taken by Mr. J. H. Killbuck, who had accompanied Mr. Weinland to Alaska in 1885, and has made some progress in learning the language of the Eskimo, among whom he lives.

Owing to sickness in his family school was open only eight months out of the ten. The largest attendance any one month was seventeen, in March. In February the monthly enrolment and average attendance were both sixteen.

The small attendance of the year is partly due to the opposition of the priest of the Greco-Russian Church, and more largely to the prejudices and superstitions of the people themselves. As soon as a boy is old enough to go to school he is of value to his parents in hunting and fishing, and they are loath to let him go. It is still more difficult to secure the attendance of the girls.

A daughter is the main-stay of the family. At the age of ten or twelve years she is sold to a man for his wife. He then takes up his abode with and works for his parents-in-law. If he finds his fortunes too severe, or tires of his wife, he simply goes off, and in a short time his place is occupied by some one else, who has been persuaded to marry the grass-widow.

Nearly all the children attending the school to the present time have been orphans, who come of their own accord. There is no doubt but that the attendance will greatly increase in the course of a few years, as it takes time among an uncivilized people to enable them to comprehend in some measure the advantages of an education for their children.

During the present summer the school-house has been enlarged and rendered more commodious, and the Rev. Ernest Weber, of Iowa, sent out to assist Mr. Killbuck.

Carmel, Nushagak River (public).—Miss Mary Huber, teacher. Enrolment, 21.

In the summer of 1887 Rev. F. E. Wolff, wife and two children, and Miss Mary Huber arrived at the Nushagak River to open a school and mission. When the call came for a teacher for the Eskimo on the Nushagak Miss Huber was the accomplished and successful principal of a young ladies' seminary in Pennsylvania. Resigning her important position and leaving all her congenial surroundings she gladly gave herself to teaching the low-down Eskimo.

Being three thousand miles from supplies and trained workmen the erection of the necessary buildings consumed the whole season and it was the first of January, 1888, before they were in shape to open school. But that was the time of the holiday festivities of the Russian Church and the whole native population went off to Nushagak Village, three miles distant, to attend them and remained a week.

The Russian celebration was followed by the annual dance of the natives at a village forty miles away and again the whole settlement was away.

It was January 17 before school was able to commence. It opened with nine pupils, which increased to twenty-one. The progress of the school seemed to have awakened the jealousy of the Russian priest, who soon forbade the people allowing their children to attend school, telling them that it was bad. Attempts were also made to frighten the children, telling them that if they learned English the Government would carry them off to San Francisco and make soldiers of them. The persecution of the children that attended school was so great that whenever the priest or his deacon was seen passing the school-house some of the children would duck their heads below the window-sill and others would try to hide.

To encourage the children in their attendance the school furnished them two substantial meals a day. Those that were regular in their attendance made very gratifying progress in their studies.

The difficulty of securing regular and adequate attendance among the uncivilized tribes is so great that the conviction grows from year to year that the true policy of the Government is to encourage among them the establishment of home schools into which can be gathered orphans, waifs, and those that would come from distant villages if they were assured of shelter and food.

The population along all the large rivers in the interior of Alaska is distributed among a large number of small villages.

It is impracticable to place a school in each or even in every fifth or tenth one. The only practicable way at present of reaching the children is to have in the valley of each large river a centrally located school with accommodations to board those that come from a distance. Plans are being consummated at Carmel to board such pupils. At the mouth of the Nushagak, the present season, are four salmon canneries employing two hundred white men and four hundred Chinamen with from six to eight vessels.

These industries gather in a large number of natives and make Carmel an important centre for a school.

III.—INDIAN BUREAU SCHOOLS.

Native Industrial Training School, Sitka, Alaska.—Prof. William A. Kelly, principal. Enrolment, one hundred and eighty-six boarding pupils.

This school hitherto has been one of the contract schools of the Indian Bureau; but, as with the approval of the honorable Secretary of the Interior, the Commissioner of Education, and the Commissioner of Indian Affairs it is hereafter to come under the supervision of the Education Office, it is proper to refer to it here.

This school was established by the Presbyterian Board of Home Missions in 1880 as a day school, with Miss Olinda A. Austin as teacher. The following fall, circumstances led to opening of a boarding department. The institution has grown until there are connected with it two large buildings, one for boys and the other for girls; an industrial building sheltering the carpenter-shop, boot and shoe shop, printing-office, wood-carving department, brass band, and boat-house; a steam laundry; a bakery; a blacksmith-shop; a hospital; and six model homes; and nineteen teachers.

The one hundred and eighty-six pupils represent fifteen nationalities or tribes. Being the only institution in Alaska with a large plant, the circumstances of the country are making it a many-sided school.

It is practically an orphan asylum. In the absence of any public provision by the Government for the care of needy orphans, they are freely received into this home.

It is a *nursery*. Small children whose mothers have died, and there is no one to care for them, are also received.

It is a *refuge* for homeless and friendless waifs; for children fleeing for their lives from the tortures of witchcraft. They here find a good home and training that will make them good citizens instead of allowing them to grow up vagabonds.

It is a *reformatory* to which the United States district court, not knowing what else to do with young offenders, has committed them. This department will be enlarged when suitable buildings can be secured.

It is a *trade school*, being the only place in Alaska where a young man can learn a trade.

It is a *high school* to which bright pupils in the various day schools desiring greater advantages than their local school can afford them may be advanced.

It is a *normal school*. If in the immediate future Alaska is to have any native teachers they are to-day among the young men and young women in the Sitka Training School.

IV.—OTHER SCHOOLS.

1.—Unalaska district.

The school at Anvik that was in commission last year was not this. But being about three thousand miles from a post-office, with only a chance mail once a year, the teacher supposed that he was still in the employ of the Government, and has sent in his annual report.

Anvik, Yukon River (Protestant Episcopal).—Rev. Octavius Parker and Rev. John W. Chapman, teachers. As mentioned in a former report, in the summer of 1886 Rev. Mr. Parker and family reached St. Michael and attempted to open a school at that point, but did not succeed. In the summer of 1887, with the full approval of the general agent of education, he removed the school from St. Michael, on the coast, to Anvik, a native village in the Lower Yukon Valley.* This was in accordance with the original plan to establish a school in the valley of the Yukon.

In the spring of 1887 Mr. Parker was joined by Rev. John W. Chapman. At Anvik they purchased and fitted up buildings for school and residence purposes, and arranged the work between them as follows: Mr. Parker was to teach three hours each day and get supper; Mr. Chapman two hours a day and get the breakfast and dinner. On Saturdays Mr. Parker did the baking, and Mr. Chapman the washing and ironing.

The statistics of daily attendance has not yet reached this office.

Seal Islands (Saint Paul and Saint George).—These two schools are maintained at the expense of the Alaska Commercial Company, in accordance with their contract with the Government. The reports are supposed to be sent to the Treasury Department. I notice that Mr. George R. Tingle, special agent of the Treasury Department, in his annual report, July 31, 1887, makes no mention of the schools. It is presumable, however, that with the fixed population of those islands the school attendance varies but little from year to year. In 1884 Saint Paul reports an enrolment of fifty-four, and in 1881 Saint George twenty-eight. These are the latest figures to which I have access.

Unalaklik, Norton Sound (Swedish mission).—Rev. Axel E. Karlson, teacher.

In 1887 the Free Mission Society of Sweden was so deeply impressed with the neglect and degradation of the natives of Alaska that it sent two teachers to this Territory, Mr. Karlson locating at Unalaklik, sixty miles north of Saint Michael on Behring Sea, and Rev. Adolf Lydell at Yakutat.

Mr. Karlson reports that it was with great difficulty that he was able to secure the materials and erect a small school-house. In September, 1887, he opened his school with Eskimo children. They made good progress during the winter.

One boy, who had already learned the Russian language, made such progress through the winter that in the spring he was able to converse in English. Others mastered the alphabet and were able to read intelligently in simple sentences. Special attention is given to the English language. Mr. Karlson has gone to San Francisco for material for a larger and better building.

2. Sitka district.

Respecting the Roman Catholic school at Juneau I have been unable to obtain any report.

Hoonah (Presbyterian).—John W. McFarland, teacher. Enrolment, one hundred and thirty-six. This school, sixty miles from a post-office, is the most inaccessible of all the schools of the Alexander Archipelago. Owing to the fact that the whole population leave their homes in the spring to hunt sea otter or work in the mines, and do not return until fall, the school was open only during the five winter months. This school received no Government assistance last year. It would be well to place it on the same footing as the day school at Metlakahla and allow a certain amount per pupil per quarter.

*But without notice to the Commissioner of Education.

Yakutat (Swedish mission).—Adolf Lydell, teacher. During the present season Rev. Adolf Lydell, of the Free Mission Society of Sweden, has built a log house on the main land east of Khantaak and opened an English school.

Schools of the Russian Church.

In addition to the above schools the annual report of the Governor for 1887 mentions fifteen parochial schools under the care of the Russian Church, reporting three hundred pupils, of which one, in Sitka, has been mentioned.

B.—REGULATIONS PRESCRIBED BY THE TERRITORIAL BOARD.

I. MEMORANDUM OF ITS ORGANIZATION.

On the 14th of July, 1887, the Hon. A. P. Swineford, Governor, Hon. La Fayette Dawson, judge of the United States district court, and Dr. Sheldon Jackson, United States general agent of education in Alaska, having been on June 15, 1887, appointed by Hon. L. Q. C. Lamar, Secretary of the Interior, as a Territorial board of education, met and organized at the office of Judge Dawson at 3 o'clock p. m.

Judge Dawson was elected chairman. At a subsequent meeting the board adopted the following rules and regulations, which were drawn up by Judge Dawson at the request of the board:

II. RULES FOR THE GOVERNMENT OF THE PUBLIC SCHOOLS OF ALASKA.

I. The school-bell shall be rung promptly at 9 o'clock a. m. and at 1 o'clock p. m., and all pupils must be promptly in their seats thereafter.

II. The teachers shall have complete control of their respective schools when in session, and may suspend an unruly pupil until the case can be heard and passed upon by the educational board.

III. Corporal punishment should not be inflicted except in extreme cases of misconduct, and then in moderation only.

IV. Calling of names, the use of slang phrases and vulgar language, must be prohibited by the teachers, and if persisted in by the pupil or pupils who indulge in the use of such terms, names, or vulgarity, so as to shock decency, must be reported to the educational board.

V. All absentees and their parents must be reported to the board, where proper action can be taken in relation to their dereliction of duty under the compulsory rule adopted by this board.

VI. The teachers must labor during school hours to advance the pupils in their studies, to create in their minds a desire for knowledge, principle, morality, politeness, cleanliness, and the preservation of physical health.

VII. Six hours shall constitute a school-day, beginning at 9 o'clock a. m. and ending at 4 p. m.; with one hour's intermission from 12 m. to 1 p. m., and recess hours must be regulated by the teachers and at such time and for such length of time as their judgment may approve, but promptness to return at the ringing of the bell must be inculcated and enforced.

VIII. And as the teachers of the various schools in Alaska are, as regards their pupils, *in loco parentis*, the custody, care, and moral training of their pupils are in a measure submitted to their judgment and discretion, but with the understanding that all questions which in magnitude exceed the power herein conferred upon the teacher must be reported to the board of education.

Obligatory Attendance.

At the opening of the year Judge Dawson, at the request of the board, drew up the following rules to secure a more regular attendance of pupils at school. They were submitted to the United States Commissioner of Education, and meeting his approval, were adopted by the board.

III. RULES FOR OBLIGATORY ATTENDANCE AT ALASKAN SCHOOLS, APPROVED BY THE COMMISSIONER OF EDUCATION, AUGUST, 1887.

In pursuance of the regulations prescribed by the Secretary of the Interior, under an act of Congress approved May 17, 1884, in relation to public schools in Alaska, and under authority of Rule B in the regulations so prescribed by the Secretary in conferring authority upon the board of education by him appointed "to provide general rules for the government of the schools and the attendance of the children," this educational board has prescribed and adopted the following as to the attendance of children of school age:

Every parent, guardian, or other person having control or charge of any child or children of the age of six years and under the age of fourteen years, residing within two miles of any school established and maintained by the Government in Alaska, shall send such child or children to such school at least two-thirds of the time during which such

school shall be taught each school year, unless it can be satisfactorily shown that such child or children is or are physically or mentally disabled. To the end that such regulations may be enforced the deputy United States marshals and Indian policemen, appointed upon the recommendation of the Governor by the Commissioner of Indian Affairs at Washington, are hereby authorized and empowered, and it is hereby made their duty, to see that all children of school age herein designated and within the limits and distance herein set forth attend said schools: *Provided further*, That when it is made to appear that the presence and services of any child of school age as herein prescribed are necessary to the care, protection, and comfort of such parent or guardian in case of sickness, accident, or any physical or mental infirmity, it shall be a good excuse for such non-attendance.

C.—SCHOOL CENSUS—PUBLIC AND PRIVATE SCHOOL.

ATTENDANCE—NON-ATTENDANCE.

It has not been practicable to take any census of schoolable youth in this Territory during the year under review.

It follows as a necessary consequence that the volume of non-attendance upon schools is equally a matter of conjecture or estimate.

The following table shows, for public, Indian, and other schools, from which reports have been received, the *enrolment* of pupils and the *monthly attendance* of pupils.

Enrolment and Monthly Attendance, 1887-88.

Station.	Number Enrolled during Year.	July.		August.		September.		October.		November.		December.	
		Total.	Average.	Total.	Average.	Total.	Average.	Total.	Average.	Total.	Average.	Total.	Average.
PUBLIC SCHOOLS.													
Unga.....	25	26	20	19	15	25	14	25	21	25	20	25	19
Bethel.....	17					9	6	11	10	11	10	13	12
Carmel.....	21												
Total, Unalaska district.....	63	26	20	19	15	34	20	36	31	36	30	38	31
Kodiak.....	81					19	10	39	21	51	31	49	27
Afognak.....	24							17	11	19	11	16	8
Total, Kodiak district.....						19	10	56	32	70	42	65	35
Douglass City.....	67					23	13	28	13	27	15	19	13
Fort Wrangell.....	106					55	40	62	47	64	52	72	59
Haines.....	144					38	11	72	15	62	15	65	20
Howkan.....	110							44	32	78	42	101	76
Juneau, No. 1.....	25					16	11	18	16	20	16	17	12
Juneau, No. 2.....	67					38	8	38	9	56	18	24	12
Killsnoo.....	44									40	26	35	20
Klawak.....	81	66	29	46	20	56	22	43	16				
Metlakatla.....	170												
Sitka, No. 1.....	60					52	49	54	50	54	51	48	45
Sitka, No. 2.....	71					37	16	25	17	23	20	37	27
Total, Sitka district.....		66	29	46	20	315							
Total, public schools.....	1,113	92	40	46	20	368	200	476	278	535	327	521	350
INDIAN BUREAU SCHOOL.													
Sitka Industrial.....	186	100	100	100	100	100	100	110	110	112	112	118	118
OTHER SCHOOLS.													
Hoonah.....	136											108	60
Grand total of all schools reporting.....	1,435	192	149	165	135	468	300	586	388	647	439	747	523

Enrolment and Monthly Attendance, 1887-88—Continued.

Station.	January.		February.		March.		April.		May.		June.	
	Total.	Average.	Total.	Average.	Total.	Average.	Total.	Average.	Total.	Average.	Total.	Average.
PUBLIC SCHOOLS.												
Unga.....	23	13	21	17	20	13	.....	.....	.....	.....	.....	.....
Bethel.....	16	12	16	16	17	15	16	15	.....	.....	.....	.....
Carmel.....	21	12	18	11	15	11	13	9	10	7	.....	.....
Total, Unalaska district.....	60	37	55	44	52	39	29	24	10	7	.....	.....
Kodiak.....	48	27	53	32	56	31	43	22	40	18	51	28
Afognak.....	20	10	12	7	14	8	14	7	11	5	17	14
Total, Kodiak district.....	68	37	65	39	70	39	57	29	51	23	68	42
Douglass City.....	27	12	.....	.....	.....	.....	60	47	40	12	.....	.....
Fort Wrangell.....	75	60	64	49	44	35	38	31	29	23	25	18
Haines.....	76	14	77	16	64	11	48	5	63	7	46	14
Howkan.....	91	58	70	41	53	23	35	26	43	28	33	26
Juneau, No. 1.....	19	13	17	14	18	14	19	15	21	17	21	19
Juneau, No. 2.....	26	16	22	20	28	22	33	27	30	23	20	20
Killisnoo.....	30	19	23	29	12	10	8	6	10	8	10	9
Klawak.....	22	15	21	14	30	16	25	13	32	14	29	14
Metlakahla.....	170	159	111	108	81	73	126	103	108	68	89	64
Sitka, No. 1.....	55	51	54	50	53	49	53	49	49	32	49	46
Sitka, No. 2.....	28	23	23	23	31	17	30	18	27	14	18	10
Total, Sitka district.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total, public schools.....	747	514	607	438	536	359	561	397	513	276	410	287
INDIAN BUREAU SCHOOL.												
Sitka Industrial.....	120	120	120	120	120	120	120	120	160	160	160	160
OTHER SCHOOLS.												
Hoonah.....	112	54	102	48	52	18	22	12	.....	.....	.....	.....
Grand total of all schools reporting.....	979	683	829	606	708	499	703	529	673	436	570	442

I also present a table showing the subjects taught in the several schools and the number of pupils who pursued each branch.

Number in Sundry Branches of Study.

	Primary Charts.	First and Second Readers.	Third and Fourth Readers.	Spelling.	English Language Lessons.	Geography.	Arithmetic.	Grammar.	Drawing.	Physiology.	Temperance Hygiene.	United States History.	Writing.	Use of Tools.	Sewing.	Other Studies.	Number of Classes.
Bethel.....	6	11	.....	11	14	.....	17	.....	17	.....	.....	.....	17	.....	3	4	5
Carmel.....	21	.....	.....	21	.....	.....	21	.....	.....	.....	.....	.....	21	.....	.....	.....	8
Unga.....	18	7	.....	25	14	.....	21	.....	14	.....	.....	.....	20	.....	.....	.....	22
Kodiak.....	30	15	11	56	56	11	56	.....	56	11	.....	.....	56	30	26	56	4
Afognak.....	9	8	.....	8	.....	17	8	.....	10	.....	.....	.....	13	.....	.....	17	3
Haines.....	64	35	.....	15	77	3	77	.....	77	3	.....	.....	20	.....	.....	77	12
Hoonah.....	73	39	.....	39	.....	.....	39	.....	.....	.....	.....	.....	39	.....	.....	.....	10
Juneau, No. 1.....	3	8	10	15	13	13	14	.....	16	.....	12	12	11	.....	3	.....	15
Juneau, No. 2.....	34	3	1	3	.....	.....	10	.....	38	.....	.....	.....	1	.....	.....	.....	10
Douglass.....	31	24	5	24	.....	.....	12	.....	.....	.....	1	.....	.....	.....	.....	.....	18
Killisnoo.....	30	6	4	5	2	5	40	3	6	.....	.....	.....	5	.....	.....	.....	9
Sitka, No. 1.....	2	36	17	55	17	27	55	.....	55	.....	55	5	55	.....	.....	.....	23
Sitka, No. 2.....	25	8	2	10	10	8	17	.....	.....	.....	39	.....	27	.....	8	.....	9
Wrangell.....	23	18	31	72	19	22	37	.....	72	.....	27	.....	72	.....	25	.....	16
Klawak.....	23	23	.....	23	.....	3	23	.....	23	.....	.....	.....	23	32	14	.....	4
Howkan.....	26	46	29	36	12	12	40	12	101	12	12	3	101	.....	.....	.....	23
Metlakahla.....	71	74	25	170	170	170	170	.....	.....	.....	170	170	170	.....	.....	.....	.....

D.—NAMES, STATIONS, AND SALARIES OF SCHOOL OFFICERS AND TEACHERS.

Gov. A. P. Swineford, Michigan,	} Board of Education.....	} \$20
Judge La Fayette Dawson, Missouri,		
Dr. Sheldon Jackson, Alaska,		
Dr. Sheldon Jackson, United States general agent.....		

Name of Teacher.	State.	School.	Salary.
			<i>Per month.</i>
John H. Killbuck.....	Kansas.....	Bethel.....	
John H. Carr.....	Ohio.....	Unga.....	\$120
Mary E. Huber.....	Pennsylvania.....	Carmel.....	
W. E. Roscoe.....	California.....	Kodiak.....	120
Jas. A. Wirth.....	Washington Territory.....	Afognak.....	120
F. F. White.....	Pennsylvania.....	Haines.....	120
Geo. B. Johnston.....	do.....	Juneau, No. 1.....	120
Miss H. Jensen.....	Utah.....	Juneau, No. 2.....	80
Miss May Hanson.....	California.....	Killishnoo.....	80
Miss M. Powell.....	Pennsylvania.....	Sitka, No. 1.....	100
Miss Y. Pakle.....	West Virginia.....	Sitka, No. 2.....	80
Miss Lyda L. McAvoy.....	do.....	Wrangell.....	100
Miss Clara A. Gould.....	do.....	Howkan.....	100
L. W. Currie.....	North Carolina.....	Klawak.....	120
Wm. Duncan.....	England.....	Metlakatla.....	
Mrs. S. R. Moon.....	Kansas.....	Douglass City.....	20

Names and Stations of Private School Teachers Mentioned in this Report.

Austin, Miss O. A., formerly at Sitka.	Roscoe, Mrs. W. E., at Kodiak.
Bingham, W. H., formerly at Douglass City.	Tuck, Prof. John A., succeeds Carr at Unga.
Chapman, Rev. J. W., at Aubik.	Weber, Rev. Ernest, at Bethel.
Kahlsen, Rev. Axel E., at Unalaklik.	Weinland, Rev. W. H., formerly at Bethel.
Kelly, Prof. W. A., Sitka Industrial School.	Wersner, E. W., at Douglass City.
Lydeil, Rev. Adolph, at Yakutat.	White, Mrs. F. E., at Haines.
McFarland, John W., at Hoonah.	Willard, Rev. E. S., at Juneau.
Moore, S. R., at Douglass City.	Wolf, Rev. F. E., at Carmel.
Parker, Rev. Octavius, at Anvik.	Wolf, Mrs. F. E., at Carmel.

E.—RESPECTING THE GENERAL AGENT'S DUTIES.

SUPERVISION.

I have not been able to comply with the rule requiring the general agent to visit every school in the Territory at least once a year. There is no regular means of communication with the schools in the Unalaska and Kodiak districts. During the summer the United States steamship *Thetis* made a tour of the villages of those districts, and it was understood that she was to enable the Government officers to discharge their respective duties. But when she arrived at Sitka no officer was allowed transportation but the Governor. Even in the Sitka district it was impossible to visit the schools at Howkan and Klawak for want of transportation.

It would add to the general efficiency if at each place where there is a suitable white population a local committee of three be appointed by the Commissioner, upon the nomination of the board, whose duties should be to provide fuel, look after repairs to the school-house, direct the school policeman, visit the school, and recommend to the Territorial board such things as may seem to be important for the welfare of the schools in their place. In several places suitable persons can be found who will perform such service gratuitously because of their general interest in education.

F.—ADDITIONAL INFORMATION.

Many particulars which, strictly classified, should appear under this head have been mentioned under topic A. I now give some information which I hope will explain some of the difficulties in the way of managing and teaching the schools in this outpost of Federal territory, without civil or military organization, and practically without any civilized organization of society, industry, or belief.

To some of these topics recommendations are attached; these are made with a view to increasing the efficiency of schools in the future.

VISIT OF THE COMMISSIONER OF EDUCATION.

The beginning of the school year now under review was marked by the visit paid to the schools of the Territory by the Hon. N. H. R. Dawson, United States Commissioner of Education, who spent part of the months of July and August, 1887, in consultation with your honorable board, and in examining many matters of importance, wherein his discriminating judgment was of great value both to the board in the performance of its duties, and to the schools under its supervision.

It would be proper here to make a more particular mention of Colonel Dawson's visit, if it had not formed an important part of earlier communications from me and from your board to the authorities in Washington.

HOW THE REGULATIONS FOR COMPULSORY ATTENDANCE OPERATED.

At Fort Wrangell, where these rules were enforced through the vigilance of Hon. James Sheakley, United States commissioner, and William G. Thomas, deputy marshal, the best of results followed. At Juneau, partly through a misapprehension of the requirements of the law, no real effort was made to enforce it. At Sitka the hands of the board were tied for the want of a policeman under their control. At the other schools for the want of proper civil officials to enforce the law nothing was attempted. If it is necessary for the Government to provide schools (of which no intelligent citizen has a doubt), it is equally necessary for the Government to compel the people to avail themselves of the advantages offered.

This is particularly true among the half-civilized people for whom the majority of the Alaskan schools are established.

Neither parents nor children have any appreciation of the importance of regular attendance at school. Nor is it to be expected that they should have. If the head of the family goes a-fishing the mother and children accompany him, and the children are out of school a week or two. If at home, the children are often kept to carry wood or water. Then again, parents neither compel nor encourage attendance. It is left entirely to the passing whim of the child.

To secure the best possible results from the school system it is absolutely necessary that the Government should use some pressure. Learning wisdom from the failures of the past, the board have unanimously recommended to the honorable Commissioner of Education that at each of the places where schools are established the sum of eight dollars per month be allowed from the school fund towards paying native policemen to enforce the attendance law.

The United States Indian Office has allowed nine dollars per month for the services of such men in keeping the peace. The union of the two sums, making the modest wages of seventeen dollars per month, will secure the services of good men who will act both in the interest of the school officers and of the Territorial school board. This recommendation is renewed among others at the close of this report.

THE EXODUS TO METLAKAHTLA.

We have the strange spectacle for the nineteenth century of eight hundred people, brought from barbarism and cannibalism to Christian civilization, giving up their comfortable homes and improvements, sacrificing their property, and going out into the untrodden wilderness to make new homes, and all for conscience' sake. They moved across the international boundary line into Alaska, and transferred their allegiance from Canada to the United States. They have settled at Port Chester, Annette Island, and named it Metlakahtla, United States. During the past year they have felled the heavy forest trees upon their new village site, erected over one hundred temporary frame and log habitations, one substantial guest house, two large buildings for public purposes, and set a good saw-mill in operation. The Hon. N. H. R. Dawson, Commissioner of Education, who was present at the landing and taking possession of the new site, and who gave the people warm words of welcome, was so interested in them that he was able to assist them in starting a day school. This largest day school in Alaska is taught by Mr. Duncan and four native assistants. In this commencement of their new enterprise it would be a great encouragement if the Government would erect a suitable school building.

SCHOOL-HOUSES.

One teacher, from her own bitter experience, reports: "Better have no school than keep it in an unsuitable room." While not endorsing her view, it is still true that suitable and comfortable rooms have much to do with the efficiency of the school.

During the year past new school-houses have been provided for the schools at Unga, Sitka, Killisnoo, and Juneau, and the house at Wrangell refitted and made comfortable.

School-houses are urgently needed at Kodiak, Afognak, Douglass City, and Metlakatla.

BOARDING AND INDUSTRIAL SCHOOLS.

The annual reports of the teachers more and more emphasize the fact that among the native population the best results can be had only where the children are separated from their home surroundings.

To do this necessitates a system of boarding schools. As there is already one at Sitka that supplies south-eastern Alaska, I would advise one at Kodiak for the Kodiak district and one at Unalaska for the Unalaska district.

AGRICULTURAL SCHOOL.

The United States Commissioner of Agriculture, in his last Annual Report, having suggested that a station be established in connection with the Sitka Industrial School for "conducting a series of careful experiments to ascertain the agricultural products best adapted to the climate and soil of Alaska, and what breeds of cattle and other domestic animals are most suited to its climate and soil," I would recommend that the board offer to co-operate with the honorable Commissioner in carrying out some such arrangement.

As early as 1885 I made application to the Commissioner of Agriculture for an experimental farm in connection with the Sitka school; and in my annual report on that school for 1885 wrote: "There is a wide diversity of views concerning the agricultural and horticultural capabilities of this region, and necessarily great ignorance. The early Russian settlers were here for furs, and the more recent Americans for mining and trading. No systematic effort, intelligently prosecuted, has been made to ascertain what can or cannot be raised to advantage. The industrial training school of this distant and but little known section of the United States furnishes a basis for a department that shall make careful experiments extending over a term of years to ascertain the vegetables, grains, grasses, berries, and small fruits, apples and the larger fruits, trees, flowers, etc., best adapted to the country; the best methods of cultivating, gathering, and curing the same; tree planting and grafting of fruit trees; the development of the wild cranberry; cattle, hog, and poultry raising, and butter and cheese making. If the Government will determine what can be done in this direction both settlers and natives will utilize the information gained. Such a course will add both to the wealth of the country and the comfort of the people."

PERMANENT SCHOOL FUND.

The present method of supporting the schools of Alaska by an annual appropriation from Congress is very unsatisfactory. As Congress one year voted \$25,000, and the second nothing, and the third \$15,000, it can readily be seen that neither the school board nor the teachers can arrange for the schools until after Congressional action has been taken, nor until such action can they be sure that there will be any schools. And not only that, but some years the action of Congress is not known in Alaska until three months after the fiscal school year commences. A failure on the part of Congress any one year to make the necessary appropriation would close the schools, scatter Government property, and throw the teachers out of employment thousands of miles away from home and friends.

The disadvantages of the present system need but to be stated to be seen.

To remedy this I would renew my recommendation of last year that Congress be asked to set apart one-fourth of the gross revenues of Alaska annually as a permanent fund for the education of the children of Alaska, without distinction of race.

In the Western States and Territories the general land laws of the country provide that sections 16 and 36 in each township are set apart for the use of the schools in said States and Territories. In some of the States this has been a munificent endowment.

But Alaska has no townships and no surveyed lands, and no law by which they can be surveyed. And when in course of time the general land laws are extended over it, the nature of the country and the peculiar climate and the requirements of the population will prevent to any great extent the laying out of the land in sections of a mile square. Thus, while no school fund is practicable for years from the lands, the General Government derives a regular revenue from the Seal Islands and other sources, a portion of which could be used in the place of the proceeds of the sale of school lands.

CONCLUSION.

In conclusion, much praise is due the noble band of teachers in the Government schools, the majority of whom are isolated from cultivated society, without comfortable school-rooms, unassisted either by a friendly public sentiment or the strong arm of the law, in daily contact with dirty and often diseased children; in more or less personal danger from the fanaticism and superstition of the people; many of them away from regular mail communications and some of them with only an annual mail. Their courage, their perseverance, their tact, their zeal is heroic.

Very truly yours,

SHELDON JACKSON,
United States General Agent of Education in Alaska.

CHAPTER VII.

DISCUSSION OF QUESTIONS RELATING TO CITY SCHOOL SYSTEMS.

Introduction—Substitute Teachers—The Departmental Plan in Elementary Schools—Thoroughness—Half-Day Sessions—Methods of Determining the Fitness of Pupils for Promotion—Examinations as a Basis of Promotion—Primary Schools—Age for Admission to Primary Schools—Physical Training—Summer Schools—School Buildings—Pernicious Methods of Heating School-Houses—Irrregularity of Attendance—Discipline—Incorrigibles and Habitual Truants—Suburban Schools—Evening Schools—Statistics of Enrolment and Attendance in Evening Schools.

INTRODUCTION.

The topics discussed in this chapter refer principally to the administration of school systems; questions which relate to methods and subjects of instruction, courses of study, etc., have been reserved for the Report of 1888-89, in which they will be treated more fully than the limits of the present Report permit.

These discussions are designed primarily to show the status of various questions which affect the progress of public education. The facts stated and the opinions quoted are taken almost without exception from the official reports of city superintendents, as they are by far the most reliable and generally the most accessible source of such information. These reports emanate from responsible officials, and the accuracy of the statements they contain may be relied upon. They are made to boards or officers upon whose approval re-election depends, and are therefore not likely to give expression to hastily formed opinions, or to contain ill-considered recommendations.

It being intended to make this chapter reflect as far as possible the prevailing sentiment upon the subjects touched among men actually employed in educational work, and in contact with the schools, the expression of any opinions except those ascribed to such men is generally avoided. It must not be understood, however, that the Bureau of Education approves the specific recommendations made in each case.

SUBSTITUTE TEACHERS.

With the increased attention to the qualifications of teachers and the demand for improved character of instruction has come a realization of the necessity for well-qualified substitutes to fill the places of regular teachers unavoidably absent. Formerly there was little or no method in the employment of such substitutes. The superintendent was usually authorized to employ any one whose services were available, and deduct her compensation from the salary of the absent teacher. It was even required in many places that the absentee herself employ the substitute, and be responsible for the quality of the instruction given in her absence. Under such systems, or lack of system, vexatious delays in securing temporary teachers were unavoidable, and efficient instruction was out of the question.

The extracts below indicate a wide-spread tendency toward reform in this respect, and contain suggestive hints for those searching for means of improvement.

"The plan of paying the substitutes a regular salary, and requiring them to give all their time not employed in filling vacancies to preparation for teaching was new, and it is a decided improvement over the old system." [Superintendent W. L. Steele, Galesburg, Ill.]

"The committee on examinations prepared a plan which met with the unanimous approval of the board, and by which a certain number of teachers were to be engaged to act as a reserve corps, and to perform duties heretofore discharged by uncertificated substitute teachers. The short experience gained since the adoption of this plan has verified in every respect the predictions of friends of this measure. Principals are cordial in their approba-

tion of the change from inexperienced substitute teachers to the reliable, well-educated, and more mature reserve-corps teachers. Heretofore, when higher-grade teachers were absent, all sorts of shifts were made to take care of the class, because the substitute teachers were of such a character that intermediate and higher grades could not be entrusted to their care. We are now able to provide teachers capable of holding, for a short period, the seventh and eighth grades; and it is not too much to say that the absence of the teacher from her class is no longer an event to be dreaded by the principal. The classes fare very well in the hands of the reserve-corps teachers supplied from the office." [Superintendent W. E. Anderson, Milwaukee, Wis.]

"The method of employing and paying 'substitute' teachers should be made more systematic, and success as a substitute teacher should be made a prerequisite for appointment as a regular teacher. With this end in view, I would recommend that the board of trustees of each ward be authorized to appoint a substitute teacher for each five hundred pupils in the schools of the ward, based upon the average attendance for the preceding year, the annual salary of each teacher to be one hundred dollars. Principals should be required to make to the trustees monthly reports of the character of the work of the substitute teachers, and the city superintendent should report, as occasion may demand, any information bearing upon the same matter. A regular record of all such reports should be kept by the trustees, and preference in appointment given to those having the best records. [Superintendent John Jasper, New York City.]

"The plan adopted by the board this year of employing three extra teachers on half pay, with the requirement to spend the whole of each school day in the class rooms and in such school work as may be required of them by the principal or the superintendent, proved a most helpful provision. Under this arrangement it is now possible for the principals of our large city schools to look after many small but important matters in the different rooms that formerly received but little attention from them." [Superintendent B. M. Zettler, Macon, Ga.]

"The unemployed holders of teacher-certificates constitute the corps of supernumeraries. They are assigned as nearly as possible according to their residence. Each supernumerary has a standing invitation to visit monthly, under the direction of the principals, the schools to which he or she may be assigned. It is believed that this privilege will prove of great value to those who would avoid the mortifying errors of inexperience." [Superintendent Ulric Bettison, New Orleans, La.]

"I am convinced that for the best interests of the school more attention should be given to the qualifications of candidates for positions in our corps of teachers, and especially to the employment of substitute teachers. Every person before receiving an appointment as a teacher should be carefully examined by the proper authorities, not alone as to scholarly attainments, but also in all the requisites of a good teacher. * * *

"I would recommend, therefore, that a competitive examination, under direction of the proper authorities, of all applicants for positions in the schools, be held annually, and that hereafter no person be elected for a first time to teach in the schools of this district, either as a regular or substitute teacher, who has not satisfactorily passed such examination. Furthermore, I would recommend that, as far as possible, all persons elected to permanent positions shall have demonstrated their fitness by substituting in our schools." [Mr. E. C. Willard, Principal of School District No. 1, Westerly, R. I.]

In those cities in which teachers' training schools are in operation, it is usually customary to require substitute work of the pupil-teachers in such schools. Mr. J. L. Terry, the principal of the teachers' training school of St. Paul, Minn., has this to say of the practice:

"Substitute teaching has been a marked feature in our year's work, particularly within the last four months. During the first term we were able to detail certain members of the training class to work with model teachers, subject to summons for substitutes, but later, as the class became smaller and the demand for substitute teachers greatly increased, we were obliged to select from the students in theory those who could best sustain the extra work, equalizing the distribution as far as possible. The result is that the average of substitute work for the year is over three weeks to each member of the class. We do not consider a moderate demand for substitutes any real interruption to our work. We allow for it and accept it as a valuable means for learning to cope with new conditions—a practical lesson in meeting emergencies which a teacher may make even more valuable than uninterrupted instruction in theory. However, we are convinced that a sudden call to work in grades higher than the fifth is a severe tax upon young ladies, of whom our course of study already requires all the work that can well be crowded into a busy year."

THE "DEPARTMENTAL PLAN" IN ELEMENTARY SCHOOLS.

The attempts to adapt the methods of high-school instruction to the elementary grades have not been attended with conspicuous success. No mention has been made of the

subject in the latest annual school reports of San Francisco, Cal., where the system was tried a few years since, and where much was expected of it.

The experiment was also made in Springfield, Mass., in 1887, at the request of the principal of one of the grammar schools. The disposition was apparent to give the plan a thorough trial, for the school controlled by the principal making the recommendation was selected for the experiment. Subsequent reports fail to state the outcome of the movement, and since it appears from the report for 1887 that the teachers of all the schools are to be assigned to separate grades in the usual way, it may be inferred that the plan failed to produce the beneficial results hoped for and was allowed to take its place quietly in the list of unfruitful and abandoned experiments.

The following paragraph leaves no doubt as to the results of the system as tried at Nashua, N. H.:

"The change which the board has made, and which went into effect at the beginning of the present school year—the abandonment of the departmental system in the grammar grades—has proved a wise and progressive measure. There is now less friction in maintaining good order in the school-rooms, the responsibilities being no longer divided. The same is true in regard to scholarship. If a class is doing good work and making commendable progress the credit belongs entirely to the teacher in charge. There is no reason for specialists among the regular teachers of the grammar grades. All who pretend to teach such classes should consider it their duty to be well prepared in all the branches required, not excepting drawing and music. A certain degree of symmetry of ability and attainments is as necessary for a teacher as for a pupil. It will not do to attend specially to any one branch to the exclusion of others equally important, or to consider that being an expert in one excuses an ignorance in another. A specialist's province is not in our common-school branches. A thorough knowledge of all these is as essential to his success as to those of the ordinary individual. Such knowledge is fundamental, upon which all true success beyond must rest. Regarding this change, I have heard no adverse criticism from parents, teacher, or pupil, and I anticipate the best results."

A greater degree of success has attended the efforts made in this direction in Newport, R. I. There the system under consideration has been in use on a small scale for several years and appears to be very satisfactory for the grades into which it has been carried. As described in a report for a former year, by Superintendent George A. Littlefield, it is as follows:

"In the first [highest] two grammar classes, which occupy adjacent rooms connected by a door-way, the departmental plan of instruction has been continued, whereby each teacher, passing to and fro, instructs both classes in certain subjects. The plan greatly economizes the teacher's time and strength, enabling her to present her few subjects most exhaustively and entertainingly."

Mr. Littlefield refers to the matter in reports subsequent to that quoted, in terms of highest praise. It will be observed, however, that this experiment was made under the most favorable circumstances possible, and although the results obtained in this instance may have been of a very gratifying nature, it does not follow that the plan would operate equally satisfactorily if it were introduced upon the more extended basis that the term "departmental instruction" itself implies.

One other city, Oshkosh, Wis., has experimented with departmental teaching during the year. The principal of the Algoma-Streetschool says: "At the request of the superintendent, a change was made on the 1st of March from the usual way of teaching. This change consisted in confining each to the teaching of one study in the several grades, rather than the several studies in one, and was instituted in the intermediate departments. This, in these grades and with us, may be called an experiment, though successfully followed in many higher institutions of learning. The change has caused no great commotion, and the results must be summed up later on."

THOROUGHNESS.

At the spring meeting of the Department of Superintendence of the National Educational Association, at Washington, in February, 1888, Dr. C. W. Eliot, president of Harvard University, read a valuable and suggestive paper entitled, "Can school programmes be shortened and enriched?" The paper attracted a great deal of attention, and was published in full in the last Annual Report of this Office and in the Atlantic Monthly magazine for August, 1888. The importance of the subject, the prominence of the author, and the publicity it received were such that it may be assumed that the essay came to the attention of a considerable proportion, if not a majority, of the school superintendents. It will be remembered that after pointing out the great need of shortening the time devoted to the studies of the elementary schools the essayist made five suggestions as to the best means of securing the object desired. These were substantially as follows:

(1) Better teachers should be obtained by making tenure of office more secure, and by increasing the proportion of male teachers.

(2) The school programme should be made more substantial, and the work made more interesting and attractive to the children.

(3) "Much time can be saved in primary and secondary schools by diminishing the number of reviews and by never aiming at that kind of accuracy of attainment which reviews, followed by examinations, are intended to enforce. Why should an accuracy of knowledge and of statement be habitually demanded of children which adults seldom possess? How many well-educated adults can add long columns of figures correctly or find the least common multiple or the greatest common divisor of six or eight numbers? Nothing but practice can keep one skillful in these exercises, and we may reasonably be grateful that few people are compelled to keep in the necessary practice. Few adult minds retain accurately considerable masses of isolated facts, and it is commonly observed that minds which are good at that are seldom the best minds. Why do we try to make children do what we do not try to do ourselves? Instead of mastering one subject before going to another, it is almost invariably wise to go on to a superior subject before the inferior has been mastered—mastery being a very rare thing. On the mastery theory how much new reading or thinking should we adults do? Instead of reviewing arithmetic, study algebra; for algebra will illustrate arithmetic and supply many examples of arithmetical processes. Instead of rereading a familiar story, read a new one; it will be vastly more interesting and the common words will all recur—the common words being by far the most valuable ones. Instead of reviewing the physical geography of North America, study South America. There, too, the pupil will find mountain-chains, water-sheds, high plateaus, broad plains, great streams, and isothermal lines. The really profitable time to review a subject is not when we have just finished it, but when we have used it in studying other subjects, and have seen its relations to other subjects and what it is good for. For example, the French programme puts a review of arithmetic, algebra, and geometry into the last year. With all his mathematical powers strengthened by the study of algebra and geometry, and with all the practice of arithmetic which his study of mensuration and algebra has involved, the boy returns at seventeen to arithmetic and finds it infinitely easier than he did at fourteen. Further, the French boy has escaped those most exasperating of arithmetical puzzles which a little easy algebra enables one to solve with facility. Many an educated New Englander remembers to this day the exasperation he felt when he discovered that problems in Colburn's Arithmetic, over which he had struggled for hours, could be solved in as many minutes after he had got half way through Sherwin's Algebra. Is it not an abominable waste of the time and strength of children to put them to doing in a difficult way, never used in real life, something they will be able to do in an easy way a year or two later? To introduce any artificial hardness into the course of training that any human being has to follow is an unpardonable educational sin. There is hardness enough in this world without manufacturing any, particularly for children. On careful search through all the years of the public school programmes now in use, many places will be found where time can be saved and strain lessened by abandoning the effort to obtain an exaggerated and wholly unnatural accuracy of work. It is one of the worst defects of examinations that they set an artificial value upon accuracy of attainment. Good examination results do not always prove that the training of the children examined has been of the best kind."

(4) Children should not be retained in grades for which they are too old. The ambition of teachers which tends to keep pupils too long in the several grades in order that classes may appear well in examinations, and the caution of parents to prevent overpressure, should alike be restrained.

(5) The tendency to diminish the time spent in school should be checked; some steps need to be taken in the other direction.

Concerning but one of these recommendations can there be any serious difference of opinion. An entire change must be wrought in the generally accepted theory of what common school education should be before the ideas embodied in the third suggestion will be carried out. Mastery—accuracy—is the one thing insisted upon more than any other, and the greater thoroughness of instruction is held to be the chief advantage that graded common schools possess over private schools. To cite expressed opinions of superintendents in support of this assertion is not necessary. The object of this recommendation was to lead to a radical change of sentiment in a matter concerning which there had been practical unanimity of opinion—not to champion one side of a question already open.

A diligent search has been made in the official utterances of school officers for an echo to the suggestion. But one has been found, that in the report of Mr. A. P. Marble, city superintendent, Worcester, Mass.

Though hundreds of others must have read Dr. Eliot's essay and carefully weighed his arguments, none was induced to abandon his views upon the value of thoroughness. On the contrary, instructions to teachers and school reports generally continue to teem

with injunctions to aim at absolute accuracy and complete mastery of the subjects taught. Nor is it infrequent that superintendents are found who would add still another year to the usual elementary course of eight years in order to increase the thoroughness of preparation for higher studies and to secure greater maturity of mind and body in the students of the high schools.

The remarks of Superintendent Marble are as follows:

"There is high authority for the opinion that pupils ought not necessarily to be detained upon a subject till it is completely mastered; in other words, that it is quite possible to over-do in the matter of thoroughness. If a pupil is to be kept in a class or a grade, and upon a certain part of a subject, till he knows absolutely all about it so far, he would never advance; for the complete comprehension of arithmetic, for example, is not possible without a knowledge of the higher mathematics; and the elementary knowledge of grammar is not perfect till it is illumined by the light of a broader knowledge. All elementary knowledge appears to be incomplete. Now, with only an imperfect apprehension of the earlier steps, it may sometimes be better for a pupil to advance, trusting to future study to let in the light upon what is now dim, than to keep him groping too long in this dimness for the light, and thus to destroy his interest. It may often be better to promote pupils who are not fully "prepared," than to keep them back. Idleness, indifference, carelessness, are bad habits, which ought to be corrected; but it may well be doubted whether the best cure for these evils is a refusal to promote. Fear of not being promoted is not the best spur to activity. If no other means can be devised to arouse the indolent, it is quite doubtful whether this will do much good. What is here said about the extreme of thoroughness must not be understood as giving countenance to carelessness or a slipshod kind of study or teaching. By creating an interest in study, and by the very best presentation of every subject taught, the minds of pupils should be directed and led, and made alert and active so far as possible. But, after all has been said and done, there will be many pupils by whom a part, greater or less, will be but feebly comprehended; and the question is, whether they should be detained at this particular stage till they understand and can do as well as the rest, or whether they should pass on.

"In general, it is useless to attempt to bring all up to the same degree of excellence, and it is better to go forward. Our teachers are too conscientious, it is believed, to relax their efforts at all because they know this truth."

HALF-DAY SESSIONS.

There is no doubt that the adoption of half-day sessions in other than primary grades is condemned by a majority of educationists. As to the advisability of their use in the lowest grades there is no general agreement, though it is worthy of note that none of the advocates of the plan are found among the school authorities of the largest cities. In every case in which it has been necessary to divide the classes in these cities into morning and afternoon sections, that necessity has been deplored and urgent recommendations have invariably followed for new buildings in sufficient numbers to restore the schools to their wonted conditions.

The following is from the report of Mr. William H. Maxwell, superintendent of public instruction of Brooklyn, N. Y., for 1887:

"It will be noted that while the number of pupils promoted from the seventh primary grade is larger than that from any other grade, it is smaller in proportion to the average attendance. The cause is easily explained. It is found in the half-day classes organized in many schools. The children attending this grade are younger than those attending any other, and hence their attendance is more irregular. As a consequence, the number of half-day classes is a constantly varying quantity. When the attendance is large a part of the pupils are allowed to come only in the forenoon, the remainder in the afternoon. This system, though never legalized or endorsed by the board of education, has been forced upon the schools by a commendable desire to do everything possible to accommodate all the children whose parents apply for their admission. It is, however, of very doubtful utility. It is questionable, even, whether it serves to any appreciable extent the purpose intended. The statistics show that only about forty-four per cent. of the average attendance is promoted from this grade at the end of each term. This means that the majority of the children are detained in this grade two or three terms. Nor can it well be otherwise while half-day classes are tolerated. If one hundred children, as is not infrequently the case, are placed under the charge of one teacher, it is certainly better, both for them and for her, that she should teach half of them in the forenoon and the other half in the afternoon, rather than that she should try to instruct all of them at one time. But those who come in the forenoon are defrauded of part of their time, while those who come in the afternoon receive only about an hour and a half of schooling each day, and learn but little, if anything. As a rule promotions are made

only from the forenoon division, and the afternoon scholars of one term become the forenoon scholars of the next.

"Since we must judge of the quality of the work in this grade, as in any other, by the number of children promoted, it would appear that nothing is really gained by these half-day classes."

Circumstances have forced the use of half-day schools in Atlanta, Ga., for several years. The superintendent, Mr. W. F. Slaton, has steadily opposed their continuance, and embodies the following in his report for 1887-88:

"The double grades taught in the Marietta and in the Summer Hill schools were abolished in September. They are still retained in Fair, Mitchell, and Houston street schools. It is true that about one hundred and eighty children are seated by this method who would otherwise be deprived of school privileges. But there are many objections to the plan of doubling the grades, among which Mr. Moore, of Fair street school, in his annual report, names the following:

"(1) The plan necessarily shortens the time of both divisions of first grade for one and a half hours daily during a greater proportion of the year. Therefore, it cannot reasonably be expected that these classes will make equal advancement with those classes which are in session full time.

"(2) The dismissal of one class while the other portion of the school is in session, to occupy the same room, must necessarily create some disorder. Many of the children attending these classes are very young and live at a distance from the school. Such require some protection while on their way to and from school—at least many parents think so—and this protection might be sufficiently afforded by older brothers or sisters of the higher grades, could they assemble or be dismissed at the same time.

"(3) The present management divides the responsibility of both teachers and pupils of these classes with regard to care of furniture and property of the school. When damage has been done it is difficult to discover the culprit or hold him responsible.

"(4) Many parents send their children to the afternoon school under protest, and ask that they be changed as soon as a vacancy occurs in the morning class. This is objectionable, for the reason that so many desire seats in the morning school, that to decide in favor of one is regarded as favoritism by other applicants, and as a continual removal of children from the afternoon to the morning class, thereby causing vacancies which must be filled by new and untrained pupils, if filled at all, is a manifest injustice to the teacher of the afternoon school."

"I heartily endorse these objections of Mr. Moore, and hope that at an early day a sufficient number of seats for all the children will be supplied, and the plan of doubling the grades be abolished."

The experience of the Los Angeles, Cal., schools is thus told: "At the close of last school year we were conducting, for want of room, eighteen double sessions, that is, two schools taught for half-day each by one teacher. This was unsatisfactory. Pupils in these schools could not do the same work as those who had all day sessions. Teachers often overwork themselves to get these schools, for the additional salary. The board (your predecessors) therefore resolved to employ a separate teacher for each school and to extend the time for half-day schools to four hours; or from 8.30 a. m. to 12.30 p. m. for morning schools and 1 p. m. to 5 p. m. for afternoon schools. This plan is much more satisfactory.

"Children under eight years of age are allowed by State law to be in school only four hours daily. It is believed that the older pupils can do some studying at home. Therefore, whatever half-day schools were necessary they have been given, if possible, to the higher and lower grades."

Favorable opinions.—The following extracts present the other side of the question:

"Our primary grades that attend school but one session a day continue to do satisfactory work; and the advantages derived by the small children from the short period of confinement in the school-room and the increase of time for recreation and outdoor exercise warrant the continuance of the plan. Three hours of school-room restraint and discipline is all that should be required of the average child during the first two years in school. More than this in many instances often proves a detriment, and not infrequently results in permanent injury to many children." [Superintendent E. Stanley, Lawrence, Kans.]

"Children of five years of age cannot profitably be taught more than three hours a day, and the instruction should be in the kindergarten. Fortunately for the little ones and for our educational system, necessity has driven us to the proper pedagogical position in this matter, for the crowded condition of most of our schools has made it necessary to divide the lowest classes into two sections, each to attend a half-day, and the instruction consists mainly of kindergarten work." [Superintendent Clarence E. Meloney, Paterson, N. J.]

"The plan of having pupils in the first primary rooms attend school during the fall

and spring months but half the day has worked well. In many cities this plan is in force and is found to be favorable for the young pupils, and at the same time economical. The large influx of little ones in the fall fills up the rooms to a crowded condition. The storms of winter cause large numbers to be dropped. These remain absent till pleasant weather in spring, thus making light schools in the winter months, if advancements had been made to provide seats for all on entering the school. The continuance of the plan is recommended." [Superintendent O. C. Scott, Oskaloosa, Iowa.]

"Hereafter, the pupils of the first year will attend but half a day instead of all day as heretofore. This change was recommended not in the interest of economy alone, but in the belief that the children can accomplish all the work usually required of them by the 'half-day plan,' and, furthermore, that it is a physical injury to the children to keep them confined in the school-room six hours per day." [Superintendent F. M. Draper, Atchison, Kans.]

PROMOTIONS.

The wide-spread interest in the subject of promotions has led to the compilation of the following description of the methods of determining the classification of pupils in the largest cities of the country. Those of the first and second classes (or claiming a population of more than 100,000) have been selected, as they, in theory if not in fact, command the services of the most competent and best equipped of the teachers' profession and presumably employ the most approved methods in all branches of school work.

San Francisco, Cal.—Yearly written examinations have been dispensed with and all promotions are made by the principals and class teachers, subject to appeal to the superintendent on the part of parents dissatisfied with the non-promotion of their children.

Washington, D. C.—"Pupils are promoted from grade to grade below the high school, and from the grammar schools to the high school, on the recommendation of the teacher and the approval of the supervising principal in charge." Examinations have no reference to promotion.

Chicago, Ill.—"In primary and grammar grades promotions are made by the principal, with or without special examination, in his discretion. From the grammar to the high schools pupils pass on recommendation of the grammar principal. The superintendent holds a supplementary examination for those not recommended. Classes in the high schools pass in course, unless some individual pupils have shown themselves unequal to the work."

Indianapolis, Ind.—"Pupils are promoted twice each year. They are examined upon printed questions originating with the superintendent of schools. All who pass a creditable examination upon these questions are promoted without further question. All pupils who fall low in per cents., but whose daily work has been satisfactory to the teacher in charge, and to the supervisor in immediate charge of said teacher and pupils, are passed upon the recommendation of those two persons—the greater stress being placed upon the teacher's estimate as being the more definite and intimate. All pupils who fall low in per cents., and who are not recommended by their teachers, are 'demoted,' and must repeat the half-year's work."

Louisville, Ky.—In the district or elementary schools: "The teachers of the several grades make and record monthly an estimate of each pupil's progress. These estimates are based on the success with which the pupils perform assigned work in each subject prescribed in the course of study, and also on the fidelity with which they discharge all their school obligations, including diligence in study, regularity and punctuality in attendance, proper deportment in the school-room and about the school premises, and neatness and cleanliness of person. For this purpose the scale of 1 to 6 is used, the number 1 denoting very bad; 2, bad; 3, indifferent; 4, good; 5, excellent; and 6, without fault.

"The principals of the district schools from time to time subject the pupils of the several grades to such tests, both oral and written, as will indicate their proficiency and progress. They examine and, when necessary, revise the monthly estimates of the teachers.

"Pupils whose standing, based on the monthly estimates of the teachers, approved by the principal, is not less than 4 in each subject prescribed in the course of study, and in fidelity in the discharge of school obligations, are promoted at the close of the year to the next higher grades and to the high schools, without examination.

"The fitness for promotion of pupils not entitled to pass on the monthly estimates is determined by an examination conducted as follows: The pupils of the first [highest] grades are examined by the faculties of the male and the female high schools, in the high school buildings; those of the other grades by the teachers of the next higher grades; the questions to be prepared by the superintendent and a committee of principals, viz: three principals of intermediate schools and four principals of secondary schools, appointed by him. An average of not less than 4 in each subject is required to pass."

In the high schools: "There are annually two written examinations of all classes;

the first is held during the last week of January, and the second during the month of June. The results of these examinations, together with the deportment, constitute the data according to which the members of the faculty make up their estimates of the students. The first examination of the first-year class is considered a trial examination; all students who fail to secure at least 4 in each subject of the first-year course are dropped from the class. No student whose combined written average for the year is less than 4 in each subject may be promoted to the next class, or receive a certificate of graduation; nor may any student whose average is less than 4 in more than one subject be re-examined for promotion."

New Orleans, La.—"Graded questions are proposed by the superintendent, and the examinations are, as a rule, under the immediate supervision of the teachers who are to receive the promoted pupils. In the grammar and primary departments the yearly record of each pupil is allowed to have its due weight in determining the question of his promotion; but in the examination for admission to the high school it is not taken into account, except in determining the question of his admission to the examinations."

Baltimore, Md.—The examination system appears to be in use, with the following modification relating to examinations for admission to the high schools and college: "The questions to be prepared by the superintendent, and the examinations conducted by the principals of the several grammar schools. All the pupils of the eighth grade shall be examined, and those who fail to pass, but who are nevertheless considered qualified for promotion by the principals, shall be sent to the committees on the college and high schools, respectively, for final action."

In the elementary grades: "The examinations for promotion are annual, but the principals of the schools are authorized to advance, at any time during the year, any pupils who exhibit exceptional intelligence, and who may be able to pursue the studies of the higher grades."

In the Eastern Female High School: "Yearly promotions from grade to grade are made by combining the work of the class-room with the results of the semi-annual examinations, the requirement being a special average of 60 and a general average of 70."

Boston, Mass.—Promotions are made semi-annually. Principals are responsible for promotions from one grade to another in their own schools, but the questions for the examinations for promotion from the primary to the grammar schools, and from the grammar to the high schools, are prepared by the supervising officers. Pupils over ten years of age are generally promoted from the primary schools, even if they fail on examination. The instructor's record of the pupil's work for the year is also a factor in determining promotions. Changes of grade not involving promotion to a higher department may be made any Monday during the year upon the authority of the principal.

Detroit, Mich.—Promotions occur twice in each year. Formal examinations, uniform for the whole city, are made at only two points in the course—on entering the grammar department and on entering the high school. Questions for these examinations are issued from the office of the superintendent. The principals are responsible for all other promotions, and are at liberty to employ such methods as they think advisable. Their usual method is the examination. Individual promotions are allowed, and are of frequent occurrence. The results of the examination for admission to the high school are rigidly adhered to; but, at the discretion of the superintendent, pupils who have passed through the primary school may be admitted to the grammar school even if they fail at the entrance examination.

Minneapolis, Minn.—"No pupil shall be admitted to the high school who has not passed a satisfactory examination in the branches taught in the grammar school. If at the end of the first or any term, he does not maintain a fair position in the classes, he may be reduced to the proper grade. Nor shall he pass from a lower to a higher class except upon a satisfactory examination.

"Before passing from one grade to another, pupils must sustain a satisfactory examination in their previous studies under the direction of the superintendent.

"In the fourth grade an average per cent. of 65, including term examinations, shall be required; in the fifth, sixth, and seventh grades, 70 per cent., including term examinations; and for admission to the high school a general average of 75 per cent., including term examinations, unless otherwise ordered by the superintendent.

"Classes in the high school, grammar, and intermediate grades shall twice a year be subject to a written examination; and any pupil in the high school and grammar grade whose average per cent. shall be below 75 during two successive term examinations, and any pupil in the intermediate grade whose average per cent. shall be below 70 for two successive term examinations, shall be reported to the principal for assignment to a lower class."

St. Paul, Minn.—Before passing from one grade to another, pupils must sustain a satisfactory examination in their previous studies, under the direction of the superintendent. For admission to the fourth grade an average per cent. of 65 is required, with a min-

imum of 45 per cent. in each study; for the fifth, sixth, seventh, and eighth grades, 70 per cent., with a minimum of 60 per cent. in each study; and for admission to the high school, 65 per cent. in each study, with a general average of 75 per cent. Pupils must stand 70 per cent. in a test examination in each topic in arithmetic before passing to the next. No written examinations are held for promotion of pupils below the A class of the third grade. In the first and second grades, individual or class promotions may be made at any time or on recommendation of the principal, and after a satisfactory examination by the superintendent. In all other classes the pupils are subjected to a written examination every eighteen weeks; an average per cent. below 50 in the intermediate grades, or below 60 in the higher grades, is accepted as evidence of the pupil's inability to pursue the studies of his grade sufficient to warrant his reduction to a lower class. Individual promotions may be made by principals of the grammar and intermediate schools at any time.

Kansas City, Mo.—Each grade of the course of the ward, or elementary, schools is divided into three sections of twelve weeks each; and the pupils of each grade are divided into three classes who pursue the studies of the three sections respectively. Promotions are ordinarily made at the end of every twelve weeks, and are based upon daily work and written examinations, but never upon "final examinations." The daily work counts four-fifths, and the written examinations one-fifth in all general promotions. Written examinations are commenced in the first year. Pupils are promoted individually whenever they can do the work of the more advanced class.

St. Louis, Mo.—"All promotions in the district [elementary] schools are made by the principals of the schools, upon the results of oral and written examinations together with the daily work of the pupils. For admission to the high school a written examination upon questions from the office of the superintendent was formerly required; but now all applicants from the district schools whom the principals recommend as being in their judgment qualified to do the work of the high school are admitted without examination. Pupils whom the principals cannot recommend after passing through all the grades of the district schools, are given an examination by the principal of the high school. Very few of these, however, pass the required examination."

In the high school: Promotions are determined by the record of the pupils' class work combined with the results of the semi-annual examinations. In each study three percentages, one for each of the preceding quarter's recitations, and one for the final examination, are averaged, and a minimum of 65 per cent. in each study and a general average of 70 per cent. in all studies are required. For graduation a higher average is required, viz: 70 per cent. in each study, and 75 per cent. for all studies, the marks for the last two quarters of the course combined with that of the final examination.

Jersey City, N. J.—In the high school promotions are made annually. The examination for admission must be in writing. It occurs annually, and is conducted by the principal and teachers of the high school under the supervision of the superintendent and committee on high schools. There is a semi-annual and an annual examination each year. The superintendent, principal, and committee on high schools fix a standard for all examinations, both for admission and promotion, and pupils failing to reach the required standard are assigned to the next lower class or, if members of the lowest class, to the grammar schools.

In the grammar and primary schools promotions are made semi-annually, and not oftener, except by the written consent of the superintendent. In addition to the semi-annual written examinations, and immediately preceding their occurrence, the superintendent and principals carefully inspect all the classes and record their condition in books kept for that purpose. Reductions in grade may be made at the discretion of the superintendent.

Newark, N. J.—Examinations are held at least twice in each year under the direction of the committee on examinations, with the superintendent. An examination for promotion and graduation is held in all the schools during the month of June in each year under the direction of the committee on examinations, with the superintendent; and all grades, from the first primary to the first grammar, inclusive, are examined in the same manner and under uniform regulations. In conducting and ascertaining the results of any examination, the city superintendent may require the aid of such teachers as may be needed.

Brooklyn, N. Y.—Semi-annual examinations, promotions, and graduations are the rule. The superintendent may at his option prepare the questions for the examinations of all the grammar grades, but he must prepare those for the graduation examinations. Promotion of pupils is based solely on the record of scholarship for the term and at examination combined.

Buffalo, N. Y.—No pupil may be transferred from one grade to another higher, except after examination. At the end of the first term in each year, the teacher of each grade must present for examination such pupils of that grade as shall, in his or her judgment,

possess the requisite qualifications to enter the next grade above, and during the last two weeks of the second term in the year, all the pupils of each grade are examined, and those who are found qualified are promoted to the grade above. The principal of the school conducts these examinations under the direction of the superintendent, whose decisions as to promotion are final.

New York, N. Y.—To be graduated from the grammar schools, pupils must pursue the studies of the highest grammar grade for one year and pass in those studies an examination satisfactory to the principal of the school. Candidates for admission to the Normal College or the College of the City of New York must pass an examination conducted by and satisfactory to the faculty of the institution to which entrance is desired. Promotions are made from the primary to the grammar schools semi-annually, and not oftener, except by written permission of the city superintendent. No pupil may be promoted from any primary school unless examined in all the studies of the highest grade of the primary school, and found qualified by the principal of the department into which the promotion is to be made.

In the grammar grades, every examination for promotion to a higher grade is preceded by a thorough review of all the studies of the grade from which the promotion is to be made. The principals examine all their classes in the prescribed branches of study at least twice a year, namely, immediately before each regular promotion.

The students of the College of the City of New York are subjected to two examinations each year. The first is oral, and occurs in January; the second is mainly in writing and takes place at the close of the second term, in June. The results of these tests are carefully considered by the faculty, who decide upon the question of the advancement of each student. Both oral and written examinations are conducted in the Normal College also.

Rochester, N. Y.—The promotion of pupils in each of the three lowest grades depends upon the judgment of the principal and grade teacher. In the higher grades, examinations principally are relied upon.

Cincinnati, Ohio.—“(1) There shall be no stated examination for the promotion of pupils in the several grades of the district and intermediate schools, but the pupils in these grades shall be promoted and classified primarily on their proficiency in the several branches of the course, as shown by the teachers' estimates of their daily work. A satisfactory standing in daily work, with good deportment, shall be accepted as evidence of the ability of pupils to do successfully the work of the next higher grade.

“(2) It shall be the duty of the teachers in F, E, D, C, B, and A (*not* in grades H and G) to make and record monthly a careful estimate of each pupil's work in the several branches *for the month*, and to average these recorded estimates twice a year—in February and in June. These estimates are to be based on the fidelity and success with which pupils do assigned work, and also on their success in meeting the various oral and written tests which are employed as an element of teaching, and they are to be made by teachers *without the daily marking of pupils and without the use of monthly or other stated examinations for this purpose.*

“These estimates of the daily success and progress of pupils are to be made on the scale of 1 to 10, the number 4 and below denoting very poor work, 5 poor, 6 tolerable, 7 good, 8 very good, 9 excellent, and 10 perfect. In recording these estimates the initial letters may be used, or, if preferred, figures, as follows: *Perfect*, Pr. or 10; *excellent*, E or 9; *very good*, G or 8; *good*, G or 7; *tolerable*, T or 6; *poor*, P or 5; *very poor*, P or 4. Any standing below P or 4 may be recorded as a failure (F or 3 to 0). It is suggested that the standing of pupils be primarily estimated as *excellent*, *good*, or *poor* and then modified, provided the higher and lower estimates can be readily made. The proficiency of pupils in writing, drawing, and music may be estimated on the above scale twice a year—in February and June.

“(3) It shall be the duty of principals to subject the pupils in the several grades, from time to time as they advance in the course, to such oral and written tests as will indicate their proficiency and progress, and be helpful to teachers and pupils, and to this end, the year's course in the several branches may be conveniently subdivided and special reviews and other tests be instituted as the classes advance from one subdivision to another. The tests in grades H and G should be chiefly oral, the exceptions being the tests of written exercises, and in all the lower grades written tests should not be employed to determine the results of oral instruction outlined in the syllabus, or to test skill in the several school arts.

“It shall also be the duty of principals to examine, and, when necessary, revise the teachers' monthly estimates of their pupils' proficiency, and to approve of the same when averaged in February and in June. They shall give teachers such instruction and other assistance in estimating the proficiency and progress of their pupils as will secure requisite uniformity.

“(4) At the close of each school year the pupils in grades F, E, and D, of the district

schools, whose standing (as above determined) in reading, spelling, language, arithmetic, geography, writing, drawing, music, and German (if studied), is good, very good, excellent, or perfect (7 and above), with good deportment, shall be promoted to the next higher grade without examination—the pupils in grade D by the superintendent. The pupils in grades C, B, and A, of the intermediate schools, whose standing in reading, spelling, arithmetic (mental and written), geography, English grammar, composition, United States history (grade A), writing, drawing, music, and German (if studied), is good and above (7 and above), with good deportment, shall be promoted to the next higher grade without examination—the pupils in grade A by the superintendent.

"Pupils in either district or intermediate grades, whose standing in not more than *three* branches is below good (or 7), and in not more than one of these three branches is below tolerable (or 6), may be promoted, provided, that all these lower estimates are not in the daily and more essential studies; and provided further, that their habitual diligence in study, taken in connection with their proficiency in the other branches, constitute satisfactory evidence that, if promoted, they will do successfully the work of the next higher grade. A pupil's fitness for promotion is not to be determined by making a general average of his standing, but by his standing in *each* of the several branches as above indicated. The pupils in grades H and G are to be promoted without written examinations and without monthly estimates.

"In case the parent or guardian of a pupil is dissatisfied with his or her non-promotion, such pupil's fitness for transfer shall, on the application of the parent or guardian, be determined by a *written examination*, the results to be considered as *additional* evidence of the pupil's proficiency; and, in case the parent or guardian is still dissatisfied, it shall be the duty of the principal to report the case, with all necessary information, to the superintendent of schools."

Cleveland, Ohio.—The school year is divided into two terms, and the promotions are made at the close of each term. Pupils in the first half-year of any grade are said to be in the second or lower division of that grade, and those in the second half-year are in the first division. In all grades below the high school, promotions are made from the second to the first division without examination, unless those who are not recommended for promotion desire to take the examination. If such pupils reach a suitable standard in examination they are given a trial in the higher division. In passing from one *grade* to another, however, all are subjected to an examination, which counts for only half in determining the pupils' qualifications for promotion.

Allegheny, Pa.—Each principal is responsible for all promotions in his own school, but the superintendent determines the fitness of those pupils who desire to enter the high school. The tests in all cases are oral and written examinations combined.

Philadelphia, Pa.—Promotions from the primary to the secondary and from the secondary to the grammar schools are made semi-annually. Such promotions are subject to the direction of the superintendent, except that the promotions from the B to the A classes¹ of the grammar grades shall be under the direction of the principals or supervising principals of the schools containing grammar grades. All promotions from the primary to the secondary schools are made only on the averages obtained at the semi-annual examinations. Promotions from one grade to another of the same school may be made at the discretion of the principal. The examinations are mainly in writing and occur semi-annually. Pupils who complete the studies presented for the "senior class," and obtain general averages of not less than 70 per cent. on final examination are entitled to diplomas.

Pittsburg, Pa.—"The principals of the several schools have full charge of promotions from grade to grade, except those from the highest grammar grades into the high school. In some of the schools promotions are made from class standing of pupils, in some by written examination, and in others by oral examination. Admission to the high school is by written examination, conducted by the superintendent and the high-school faculty, in orthography, reading, writing, drawing, arithmetic, geography, grammar, and history."

Providence, R. I.—"During the first five years of school life, pupils are promoted from grade to grade solely upon the judgment of their teachers. During years six to nine, inclusive, upon the united judgment of the teacher and the principal of the school, based upon daily work (determined by occasional marking of test exercises) and upon semi-annual examinations, the work counting two-thirds and the examination one-third in this estimate. In the high school the same method is pursued. Pupils whose daily work is credited at 80 per cent. or above are not subjected to the semi-annual examination. Pupils who have been twice over the work of any grade are promoted without reference to their record."

Milwaukee, Wis.—It is the duty of the principals to report to the superintendent the results of all examinations for promotion within a week after their occurrence, together

¹ Each "grade" is divided into a B and an A class, representing the first and second half-year's work, respectively.

with duplicate copies of the records of the pupils' regular work during the time they have been in the grade, and with specimens of the penmanship of the pupils examined.

No promotions are made until the examination and record of pupils' work have been approved by the superintendent, and the promotions authorized by him. The basis of the regular class promotions is an average of credits obtained by the pupils in the final examination and in their regular work during the time they have been in the grade. An average of 70 per cent. of the combined standings in each of the subjects of reading, penmanship, and arithmetic, and an average of 70 per cent. in all other studies, entitle pupils to promotion, but those who fall below this standard may be promoted if upon re-examination they obtain a standing of 70 per cent. in each of the studies mentioned.

Pupils completing the full course of instruction in the elementary schools and obtaining in the combined record of grade work and final examination an average of not less than 70 per cent. in each of the studies of reading, language, spelling, and arithmetic, and an average of not less than 70 per cent. in all other studies, and who obtain not less than 50 per cent. of the maximum standing in either of the records of work and examination respectively, receive certificates entitling them to admission to the high school.

"The superintendent may exempt any pupils from examination and grant promotions or certificates to said pupils upon such written vouchers and upon such records of the pupils' work, presented by the principal and class-teachers, as shall be in his judgment a satisfactory evidence of the fitness of such pupils for promotion without resort to examination."

EXAMINATIONS AS A BASIS FOR PROMOTION.

The discussion of the examination question has continued during the year with unabated vigor, though it is apparent that the movement opposed to examinations has reached a point beyond which its progress must be slow indeed. It may be true, as one enthusiastic advocate of the "teacher's estimate" system has said, that "examinations for promotion will soon be things of the past—an unpleasant memory," but it is not likely that such a condition of affairs will exist for a number of years at least. A large number of sturdy believers in the efficacy of examinations must be converted or removed from their present commanding positions before it may be expected to witness the final decease of the examination system.

In the last Education Report, extracts were presented showing in what esteem the written examinations are held in Boston, Philadelphia, and other cities. The following paragraphs show the favorable opinions of a number of other officers controlling systems of various degrees of importance:

"Examinations of too great frequency, or improperly conducted, or when made the sole test of advancement, may be hurtful, and give plausibility to the charge of cramming; but as a means of putting a pupil to the test, and of compelling him to reduce to written form his knowledge on the subject of his studies, they are almost invaluable and should not be banished entirely from the schools." [Mr. J. E. Sater, president of the board of education, Columbus, Ohio.]

"The semi-annual examination for graduation serves a most important purpose in the school economy. It constitutes a standard toward which all—both teachers and pupils—may strive; it unifies the work of the schools; it prevents unfit pupils from being graduated into the central school; and it is one of the most powerful agencies in the hands of the superintendent by which to discover and correct abuses and deficiencies in teaching." [Superintendent William H. Maxwell, Brooklyn, N. Y.]

"The superintendent has for two or three years had a special examination under his personal supervision, in order to ascertain the exact condition of each class. Experience has proved that this is the most valuable of all the examinations, and acts as a powerful stimulus on both teachers and pupils." [Report of the Public Schools of Savannah, Ga.]

"There are at least two direct and highly beneficial advantages arising from the judicious use of written reviews. They are the one thing needful to reveal to teachers the lamentable and unaccountable misapprehension which some pupils are constantly getting in regard to their studies, from both their own efforts and the instruction of their teachers. Written reviews also promote exactness of thought, definiteness of conclusion, and cultivate the power of clear and concise expression. Indirectly they are, when wisely treated, great helps in creating an earnest and high moral tone in the school, and thus often become efficient aids in securing good discipline." [Superintendent W. E. Buck, Manchester, N. H.]

"It is quite the fashion in certain quarters to denounce the written examination as putting too severe a strain upon the pupils, or as inducing a mechanical sort of work on the part of the teacher. It is true that written examinations may be so conducted as to do harm, and so any other good thing may be abused; but these examinations as they have been carried on in Hingham are a help to teachers and pupils. It is a good thing for a merchant to take account of stock at the end of the year, to balance his books and

see how he stands with the world; it is a good thing for a school-boy once in a while to be called upon to tell definitely what progress he has made, what power he has gained in the time that has passed. The examinations may be used to spur a lazy pupil, without unduly urging the one who studies faithfully; they make very good exercises in the use of language; our pupils do not worry nor fret over them; on the contrary, the children themselves see in the examination a means of finding out whether they really understand what they have studied." [Superintendent L. P. Nash, Hingham, Mass.]

"These examinations are in writing on the subject studied, and are intended to ascertain how much the pupils have been benefited, rather than how much they remember. I have found them valuable; they serve to show improvement and deficiencies. The attention of the teacher is called to both." [Superintendent F. E. McFee, Woonsocket, R. I.]

"After all the agitation on the subject of examinations for promotion has had its day and the atmosphere has been cleared of the smoke of the conflict, I predict that the examination, by some other party than the teacher of the class, will survive as a prominent factor in determining the promotion and classification of pupils. It may not be difficult to conceive an ideal condition of things in which such means would be unnecessary and useless, but that condition does not now exist and, I am afraid, will not exist this side of the millennium." [Superintendent A. T. Wiles, Covington, Ky.]

"Well-conducted written examinations, at suitable intervals, furnish to teachers and pupils reliable information upon various matters which it highly concerns them to know, and which could be obtained by no other means. They reveal to pupils their deficiencies and acquaint them with the accuracy and *permanency* of their knowledge and their ability to express, in writing, what they have labored to acquire. They furnish teachers with the desired information concerning the knowledge or ignorance of their pupils of the subjects pursued, and reveal to them also the efficiency and defects of their own instruction." [Superintendent J. H. Davis, Somerville, Mass.]

Opposing views.—Dr. E. E. White, now superintendent of the Cincinnati (Ohio) schools, is pre-eminently the leader of the anti-examination crusade, and it is but proper to quote his utterances at some length. In his last report is the following:

"In considering, from a wider survey, the evils resulting from stated written examinations when used to determine the promotion and classification of pupils, and to compare schools and teachers, I once used these words:¹

"They have perverted the best efforts of teachers, and narrowed and grooved their instruction; they have occasioned and made well-nigh imperative the use of mechanical and rote methods of teaching; they have occasioned cramming and the most vicious habits of study; they have caused much of the overpressure charged upon the schools, some of which is real; they have tempted both teachers and pupils to dishonesty; and last, but not least, they have permitted a mechanical method of school supervision.

"It is not asserted that these results, especially in the degree here indicated, have universally attended the adoption of the "examination system." These tendencies have been more or less effectively resisted by superintendents and teachers, and they have been measurably offset, in some instances, by other measures, as the considering of the recitation record of pupils; but the testimony of educators, competent to speak, confirms the writer's experience and observation, and inside facts show that the above indictment of the system, when used for the purposes named, is substantially true. In the very nature of things the coming examination with such consequences must largely determine the character of the prior teaching and study. Few teachers can resist such an influence, and, in spite of it, teach according to their better knowledge and judgment. They cannot feel free if they would. The coming ordeal fetters them more or less, whatever may be their resolutions, and many teachers submit to it without resistance; and this is sometimes true of teachers who have been specially trained in normal schools and are conscious of the power to do much better work. They shut their eyes to the needs of the pupil and put their strength into what will "count" in the examination."

"On visiting the schools I found on every hand these unfavorable influences of the system, and all efforts to secure the adoption of more natural and rational methods of teaching ran directly against this examination wall. I soon became convinced that no satisfactory change in school instruction could be effected while this hindrance was in the way, and the only remedy that promised relief was a radical one—the *disuse of stated written examinations to determine the fitness of pupils for promotion*. But this involved the devising of another method as a substitute, one that would afford relief and, at the same time, secure that degree of uniformity of attainment essential to the proper classification of pupils. The disposition to make a change was enhanced by the discovered fact that the examination system was failing to secure this result—the one specially sought to be attained by it. It was found on inquiry that the lower third of the pupils ad-

¹Elements of Pedagogy, page 199."

mitted to the high schools in September, 1886, were in attainment more than a year below the pupils in the upper third of the class, and a like difference in attainments was found in the classes in the intermediate schools. The very thing that the 'percented examinations' were failing to secure, was needed uniformity of attainment.

* * * * *

"An impression seems to prevail that written examinations have been wholly dispensed with in the Cincinnati schools. This is an error. The written test is no longer made the basis for the promotion of pupils, and it no longer occurs at stated times, but it is continued as an element of teaching, where its uses are many and important. It is now distributed throughout the year and comes without previous notice.

"There is nothing in the new plan that prevents the superintendent from subjecting the instruction in any branch or in any grade or school to such tests, oral and written, as will in his judgment indicate the success of teachers or suggest and promote needed improvement in methods. It is believed that the use of special tests from time to time, the same being unannounced and unanticipated, are much more effective and salutary than a reliance on stated examinations for which pupils may be specially prepared and even 'crammed,' to use a word which, as an educational term, ought to be obsolete. Besides, it is not easy to prepare tests that will disclose imperfections in teaching and, at the same time, be a fair basis for promotion. An examination employed as an aid in teaching and study is one thing; an examination regularly instituted to determine the transfer of pupils is a different thing."

Other arguments advanced upon the same line are as follows:

"Nothing is more delightful to a teacher than to have his work commended, and if by industrious examination we ascertain the parts of each teacher's work that can be justly commended, he will daily seek to make it worthy of praise in all respects. The teacher is daily finding out the attainments of each member of his class, and when the time arrives for promotion, is it not wise, if we would properly grade the schools and stimulate the scholars, to avail ourselves of this knowledge? If the teacher knows that this opinion of his pupils, ascertained through daily contact with them in the classroom, is going to be the most important item in determining the question of promotion, will he not endeavor all the more faithfully to teach his class and manage it so that his work may have the greatest possible effect in getting his pupils ready for promotion? And will not the pupils, who know that their teacher mainly decides upon their fitness for promotion, be more anxious to work so as to deserve their teacher's good opinion? Under the present system there is no doubt of the fact that our pupils are acquiring not only more knowledge than by the old method, but that they are acquiring vastly more power, and what is most desirable, our teachers are encouraged to use better methods of instruction." [Superintendent H. A. Wise, Baltimore, Md.]

"The factitious importance of high per cents., a superstition in which pupil, parent, and teacher join, and which makes it almost impossible for the superintendent so to prepare for the examination as to have its real purpose carried out, makes it a time of excitement injurious in some instances to health, and injurious in all instances to sane habits of study." [Superintendent J. J. Burns, Dayton, Ohio.]

"The plan of admitting to the high school without a special examination has been in operation for twelve years. * * * We are told that with our present method the high school will contain some poor scholars. This is true, and we presume this would be the case in any school under any system. A school is maintained for the benefit of the community, not for the purpose of affording a place where certain good scholars may recite daily. The schools must take the material that is found in the community and work with it. A dull child must attend somewhere. We can not select the class of pupils we desire. We can keep a child for years in one grade, but he cannot be denied the benefits of the schools, even if in the curriculum there are studies in which he fails term after term to pass an examination. We are told also that there will be shirking on the part of many unless the members of the class are driven to their work under the spur of an examination. This is a confession of weakness upon the part of teachers and examiners and a charge of lack of capacity and disinclination to work upon the part of the pupils. Not all who are enrolled upon a school register are capable of becoming good scholars. There are many teachers who are doing good work in the school-room to-day that were unable when pupils to pass a good examination. Their efficiency now, however, is not questioned." [Superintendent J. G. Edgerly, Fitchburg, Mass.]

"It seems wise that, if possible, the instruction in our schools should be freed from the narrowing and mechanical influence of the present system of examinations. Any attempt, however, to relieve the situation by freeing some branches from prescribed examinations might intensify the pressure on percented branches. I believe a large percentage of the teachers are decidedly opposed to that cramming and driving for per cents. and to a narrow-rut, routine method of teaching which these percented examinations necessarily impose on the schools." [Superintendent S. S. Taylor, St. Paul, Minn.]

PRIMARY SCHOOLS.

Each year adds to the importance attached to the training of the first three or four years of a child's school life. In the last Annual Report of this Bureau the subject was touched, and an intimation given as to the increased attention which the lower grades were receiving at the hands of school boards. During the year just past this movement, if such it may be called, has extended until every city in which this Office has a correspondent has been more or less affected by it.

It cannot be said that the full importance of primary schools is yet universally recognized in the substantial matter of dollars and cents, but that importance is certainly realized; and such is the progressive spirit now manifested by school authorities that the realization of a genuine need is almost invariably the precursor of its recognition in the more substantial way.

It may, therefore, be confidently predicted that primary schools everywhere will soon be placed upon their deserved basis of equality, at least, with schools of higher grades, not only in the matter of equipment but in quality of teachers as well.

The extracts below show the reasons for the efforts that are being put forth in this direction, and in a measure, the progress already made toward the accomplishment of the desired end:

"Nearly two-thirds of the pupils attending our schools receive instruction in the primary department. Considering this, together with the fact that here the foundation of their training is laid, and that many pupils finish their education in them, there can be no question of the fact that these schools should receive the most of our care and attention—every convenience should be supplied, and every inducement held out, so that all the children of proper age in the city might be able to avail themselves of their humanizing influence. As they are equipped, organized, and conducted, so will our system be—they are the vital part, and their improvement or decline will in the greatest degree affect the whole system. They should be amply supplied with inviting school buildings, conveniently located, suitably arranged and furnished, and with experienced and well-paid teachers." [Superintendent Henry A. Wise, Baltimore, Md.]

The views of Superintendent A. T. Wiles, of Covington, Ky., are expressed by this quotation from the late Joseph Paine, of the College of Preceptors, London:

"Whatever may be done in the case of those children who are somewhat advanced in their course, and who have, to some extent at least, learnt how to learn, it is most of all important that, in the beginning of instruction, and with a view to gain the most fruitful results from that instruction, the earliest teacher should be an adept in the science and art of education. We should do as the Jesuits did in their famous schools, who, when they found a teacher showing real skill and knowledge in teaching in higher classes, *promoted* him to the charge of the lowest. There was a wise insight into human nature in this. Whether the child shall love or hate knowledge—whether his fundamental notions of things shall be clear or cloudy—whether he shall advance in his course as an intelligent being or as a mere machine—* * * depends almost altogether on the manner in which his earliest instruction is conducted."

"In a system of schools the primary grades are in many respects the most important. In our own city this is particularly so. In these schools, embracing the work of but three years, we have as many children and as many teachers as there are in all the other grades combined, covering a period of ten years of school work.

"For this reason the teaching in primary schools should be of a superior character, and teachers should be selected for them who are fond of children and who have an aptness to teach. At this age children are most susceptible to impressions, and it is in these schools where right teaching is of greatest value, and where poor teaching is most injurious. In advanced grades indifferent teaching may be endured without serious results, provided the child has had the advantages of good mental training in the lower grades, for this kind of teaching may have so trained his mind to proper habits of study that the pernicious effects of poor teaching in advanced grades will be greatly diminished." [Mr. William Connell, city superintendent, Fall River, Mass.]

"The greatest good to the greatest number demands the *best* teachers in the primary or first four years of school life. Seventy-four pupils of every one hundred never go beyond the fourth grade." [Report of the Superintendent of City Schools, Cairo, Ill.]

"The primary department of our schools has received, as it should, the chief consideration at the hands of this board, and it is not too much to say that its efficiency has been doubled within the past few years.

"Among the first measures of reform in school organization in 1879 was the repeal of a system of salaries that did very great injury to this class of schools. No opportunity should be omitted to extend the efficiency of the primary schools; they are the basis of our system, and constitute that portion of it which carries the benefits of education to the largest number of our people." [Mr. Edward T. Steel, president of the board of education, Philadelphia, Pa.]

"My work of superintending has been very much lightened by the action of the board in placing the most experienced teachers in the F grade and by retaining them there. In all good schools much attention should be given to the lower grades, but with such an excellent corps of teachers as the board has placed in the F grade, I am relieved of the necessity of visiting and instructing these teachers." [Report of the Senior Principal, Newport, Ky.]

"These teachers [of the primary schools] are doing their work well. They are keenly alive to its importance. The old idea of placing here inexperienced teachers or persons of ordinary capacities and meager acquirements has no favor with the board of education. No one has more need of experience in dealing with minds than she who has them in charge through the most critical period when they are receiving impressions as lasting as life. The work done has been exceedingly satisfactory in most part, giving evidence of most faithful efforts on the part of the teachers, and corresponding progress of the pupils under their instruction." [Mr. Newton C. Dougherty, superintendent of schools, Peoria, Ill.]

AGE FOR ADMISSION TO PRIMARY SCHOOLS.

This question is frequently discussed, and, like all others, has called forth wide differences of opinion. The growing popularity of kindergartens and kindergarten methods has served to strengthen the ranks of those favoring early admission to the schools, while the general insufficiency of accommodations adds a potent argument to those advanced by the advocates of the other side.

The subject is not a new one, and the reproduction of a considerable number of arguments is unnecessary. The two quotations immediately following fairly show the opposing views of American school-men upon the question. The fact that the two gentlemen quoted, both eminent educationists, held the same position and were surrounded by the same conditions at the times of writing detracts nothing from the interest of the discussion.

"Under the laws of the State, children need be but five years old in order to be admitted to a public school. Of the 70,925 on register in our schools at the close of the year but 2,241 were under six years of age. That there would be a much larger number of pupils between the ages of five and six in attendance upon our schools, if sufficient accommodations were provided, is unquestionably true. The wisdom of permitting children under six or seven to attend school has frequently been discussed. Very many are of the opinion that the age limit for the admission of pupils should be fixed at seven or eight. In discussing this matter in my report for 1884, I said:

"The proposition to exclude from the schools children under six years of age has been made under the misapprehension that it would remove the necessity of furnishing additional accommodation for our primary classes. The 2,639 children from five to six years old in attendance upon our primary classes are distributed among over fifty schools, and their dismissal would not remove the necessity of a new school building in any locality now demanding one.

"A study of the table on page 40 of this report reveals the fact that in the richer neighborhoods of the city there are comparatively few children attending school who are not more than six years old, and that in the poorer neighborhoods there are in most of the schools from one hundred to two hundred between the ages of five and six. It must not be assumed that these young children are simply kept quiet in school and that they do not make any noticeable advancement in their studies. A visit to one of our sixth primary classes will prove the opposite to be true. Children entering school at five, as a rule, complete the first reader before they are six and are able to write numerous words and sentences from dictation. Many of these children are taken from school at an early age, and a law excluding them till six years old would not only shorten their school life but keep them longer upon the streets where those habits and tendencies are formed which seriously interfere with their future usefulness as citizens."

"Such study and thought as I have been able to give this question during the two years since the above was written have confirmed me in the opinion I then expressed.

"In St. Louis kindergarten schools, to which children are admitted at the age of four, are maintained largely at the public expense. It is claimed by those in charge that the pupils who enter these schools at four and continue until they are six have become fitted intellectually to take up the regular grade work, and that they advance more rapidly than children who are admitted to the regular school work without such preparation. If these claims are well founded it would certainly seem to be sound public policy to make provision for the education of children who have reached the age of five or six. The work required of pupils so young should certainly be adapted to their age, but any regulations or law fixing the legal age for the admission of pupils at over five years should be opposed." [Report of Mr. Calvin Patterson, city superintendent of public instruction, Brooklyn, N. Y., 1886.]

"I am of the opinion that it would be judicious on the part of the board of education to pass a resolution to the effect that after a given date, say January 1, 1889, not more than sixty pupils should be placed on register in any class in the public schools. The registers of these lowest classes could, in the mean time, be reduced by simply refusing admission to the youngest applicants. It is not a hardship that a child of five years should be asked to wait until it is six or seven before entering school. Indeed, the majority of educators are now agreed that children should not commence the grade work of the public school until after the sixth year has been passed. For my own part, I am strongly of this opinion. I believe that the average child is injured both physically and mentally by being put too early to the largely mechanical work of learning to read, write, and cipher. Physiological psychology tells us that up to the end of the seventh year 'the inner mental activity gradually develops itself to the point of equilibrium with the receptive functions of sense.' After that date 'conscious design' begins to take the place of instinctive impulse; habits of obedience are formed; memory, imagination, judgment, and reason are developed. To force this development is to outrage nature. To follow nature is the educator's wisest course." [Report of Mr. William H. Maxwell, city superintendent of public instruction, Brooklyn, N. Y., 1887.]

The following is presented as an expression of foreign opinion on the same subject. In their last report the Committee of Council on Education in Scotland say: "Early school attendance is of inestimable advantage, and its use is seen in the later stages of the child's education, where the habits of discipline and attention thus early acquired can not fail to have an influence. Its importance, in view of any technical instruction which it may be possible to introduce into our schools, can hardly be exaggerated. We hope that the feeling in favor of such instruction is growing, and we trust that school managers will do all in their power to foster it, by providing special infant departments, by neglecting no means likely to stimulate their interest in their earliest school work, and especially by giving prominence to such exercises as may develop the faculties of observation, manual dexterity, and general intelligence. It is thus that the infant school may become an effective agency in the work of education, and may, especially for the poorer population of towns, take the place of the early home education open to others more favored. It must not be forgotten that for such children the alternative for attendance at school is neglect and the acquiring of habits which it is difficult afterwards to correct."

PHYSICAL TRAINING.

More attention has been accorded this subject than in previous years, and it can not be doubted that the time is approaching when the full value of physical development will be universally realized.

In discussing the proper age for admission to high schools, Mr. Ulric Bettison, chief superintendent of public schools of New Orleans, La., states: "The impression that our high school juniors are too young for their grade was doubtless produced by a glance at the pupils themselves. Among the number are many past the age of fifteen who are small, delicate, and childish in appearance." This could with equal truth be said of any school in the country, for there is none that has not a considerable proportion of pupils who are unnaturally "small, delicate, and childish in appearance." Such being the case, it can not be supposed that the application of the only real remedy will be long delayed.

In the Report of this Office for 1886-87 it was asserted that "beyond the general calisthenic exercises that obtain in some localities, no provision has been made by any city for the systematic training of the pupils of elementary grades."

This statement is still true, for no city even yet provides systematic physical training for elementary pupils, though important steps have been taken in this direction, as the following quotations show:

For the Hamilton-Street grammar school at Holyoke, Mass., "During the past year a gymnasium has been provided and furnished at a cost of \$102.50. The following is a list of the apparatus: Quarter circle, parallel bars, rowing machine, two pairs chest weights, home exerciser, two pairs swinging rings, one hundred pairs dumb-bells. It is proposed to add to this from time to time if it prove a success. The gymnasium proper is designed especially for the use of teachers and the girls of the ninth and eighth grades. The room is open for exercise before and after each school session. Thus far this work has been purely voluntary. In addition to this work in the gymnasium, each class in the school is expected to be present once in two weeks in the large exhibition hall for practice half an hour in marching and dumb-bell exercise. It is believed that a little work of this kind judiciously and systematically carried on will greatly improve the health of both teachers and pupils, will prevent the tendencies to round shoulders, weak lungs, and listless motions, and thus, by strengthening the body, strengthen the mind."

At Meridian, Miss.: "Owing to the limited space allowed students for physical exercise it has been decided to provide a gymnasium on the grounds. This will give students ample opportunity for the proper development of their physical powers, without which healthy mental growth is impossible."

The building committee of the Madison, Wis., board of education "in their plans for the new third ward and high school buildings have made provisions for suitable and convenient places for gymnastic exercise."

In high schools.—The number of high schools possessing appropriate gymnastic appliances is widening, though not with the rapidity that might have been reasonably expected. The principal of the Portsmouth, N. H., high school says in his last report:

"Within the year there have been added to the gymnasium, with money voted by the boys, a 'tug of war' board and rope, a tumbling-belt, a set of ladders, and a sufficient number of wands for the school in concert exercise. The girls have purchased a supply of rings for their use. In addition to the above the school gymnasium contains, purchased largely by the pupils in the last three years, a wrist-machine, rowing-machine, chest-weights, line rings, parallel rings, trapeze, horizontal bar, parallel bars, climbing-rope, dumb-bells, and Indian clubs. We have, so far as I know, the only and certainly the most complete school gymnasium in the State, and the good results obtained are so marked in so many cases, that I can emphatically say that the money expended by the committee two years ago, and that expended by the school at that time and since, could not have been used to better advantage."

"Besides the general use of the apparatus during the year, class instruction has been given to both boys and girls in club-swinging and dumb-bell exercise. During the present term the girls have made good progress in the use of the rings, and the boys have just begun exercising with wands."

Mr. Zephaniah Hopper, acting president of the Central High School of Philadelphia, incorporates the following in his report for 1887:

"It has always been the aim of the faculty to encourage the students in their athletic exercises. Owing to the absence of a gymnasium, or even a play-ground large enough to accommodate the school, there has been but little opportunity for training and developing the body. However, the students have, in a measure, made up for the deficiency by an athletic association, by which some effort at systematic training is made. During the year, through the courtesy of the authorities of the University of Pennsylvania, two public exhibitions were given on the grounds of the University."

"I have no hesitation in saying that the work of this association has had a decided effect upon the physical development of the students, and, indirectly, has aided the discipline of the school. If the unassisted efforts of the students produce such happy results may it not be wise to give them *systematic training under instruction?*"

In a considerable number of high schools military drill is a prominent feature, and its effects upon the physical appearance of the students have been marked and beneficial. It is conceded to be a means of physical training of great value.

Recommendations.—Among the recommendations in relation to the subject under consideration are these:

"In these days of intellectual high pressure the importance, I may say necessity, for good health and physical endurance can hardly be questioned. As the body is the instrument as well as the dwelling place of the mind, it should be developed and trained to do the best service possible."

"While we have done something, our efforts have been in a large measure defeated on account of limited facilities in the matter of suitable rooms, apparatus, and instruction. The necessity for intelligent and systematic instruction in this subject is admitted by all. How shall it be done? is the question awaiting an answer."

"The first step undoubtedly is to provide a competent instructor to teach and train the pupils of the normal school and the teachers in the schools."

"The next step is to make the best provision as to room that the school buildings and premises will permit. And here I might say that many of the school buildings have ample courts, in many cases warmed, that can very easily be utilized for this purpose, if thought best."

"In the next place, provide such simple gymnastic apparatus as can be well and readily used. All this can be done at small cost and without in any large measure interrupting the present order of exercises. The advantages that this instruction and physical training will bring to pupils and teachers in the development of the body and better health will more than compensate for the required labor and expense."

"This work, of course, should be made a part of the course of study and receive the same supervision and care given to the other subjects."

"I trust the course of study committee will take early steps in perfecting the plan and methods for introducing this course of work into all the schools." [Mr. William N. Barringer, city superintendent, Newark, N. J.]

"We must abandon the class system and all the other unnatural and exacting conditions of study which now apply to boys and girls alike, and introduce a course of physical exercise of equal rank with the mental." [From the Report of the School Committee, Manchester, N. H.]

"Three times a day such calisthenic exercises as are possible in the rooms are practiced. No more is done. Many children grow up without health and physical vigor, who might by proper development be made healthy men and women. Gymnastic apparatus might be introduced in any school with little expense, and its use, properly directed, would be worth more to many boys and girls than any other education you can give them. All this is especially true of girls in the higher grammar classes and the high school. They no longer engage in the vigorous sports of childhood and no physical exercise has been substituted for the active games of childhood. They are at a critical period of life, emerging into womanhood. Whoever looks attentively at a class of girls of this age, sees forms that are growing bent and feeble, and which are losing daily in muscular vitality. What could you give them more valuable than daily training which would straighten the figure, deepen the chest, stimulate the muscles, in short, fill the body with life which would not only give them present health, but would also carry them into later years healthy women." [Mr. Charles E. Gorton, city superintendent, Yonkers, N. Y.]

The president of the board of education of the same city also favors physical culture in the schools, and supplements the superintendent's suggestions with the following:

"Another great want in the public schools is a thorough system of physical development which shall keep pace with the system of intellectual culture.

"Trained minds will avail little in the battle of life without the health and energy which come with a full physical development. * * * Physical exercise should, therefore, alternate with intellectual work during the school hours, and such exercise now forms a part of our course of study. We believe, however, that more attention should be paid to the subject and a better system adopted, a system which will give uniform development as well as the necessary exercise.

"Modern science and ingenuity have developed apparatus and methods which, while they are not costly either in themselves or in the room they occupy, have been demonstrated to be exceedingly efficient. * * * We have included in the estimates for the ensuing year a small sum for the purchase of the apparatus to which reference has been made."

SUMMER SCHOOLS.

There seems to be no good reason why this comparatively new feature should not find its way into general favor. The work that summer schools accomplish is special in its character, but it is none the less important.

There are hundreds of children in every city whose previous lack of school advantages or slower mental faculties cause them to fall behind their classes and remain longer than the allotted time in the several grades. These pupils are required to pass over the same ground for the second time, feeling no interest in the work that is already familiar to them, and suffering the humiliating consciousness of inferiority to their former classmates. As the schools are now organized they lose in this way five or ten months, the time depending upon the frequency with which promotions are made, while in all but extraordinary cases two or even one month's extra instruction would properly fit them for the higher grade. For children of this class the organization of summer schools would prove of the greatest value, and would in many cases lengthen for several years the school life of children who would otherwise be discouraged by failure to obtain promotion and leave school entirely.

Should they continue in school, under the present system they must be provided with an extra term of schooling, and on the score of economy alone the summer school is advantageous, for two months' tuition is certainly cheaper than five or ten.

A pupil's age should have much to do with his classification. A great fault that may be found with the classification of the average city school is the presence in every grade of a number of pupils whose ages are far in excess of the proper age of children of that grade. It is generally agreed that such belated pupils should be advanced toward the grade for which at their age they should be prepared, with as much rapidity as their progress will permit. In the majority of cities the practice of skipping a grade entirely is permitted under such circumstances. This is generally objectionable, because the pupil should be familiar with many of the subjects taught in the grade skipped in order to satisfactorily pursue the studies of the higher grades. But the objections may be obviated by instructing the pupil for a few weeks in the most essential points of the work accomplished by the class which he is to join; and the summer school is the best and most available means of doing so.

Business of nearly every kind is always dull in summer, and numbers of youths who

are obliged to work all winter to sustain themselves are then out of employment. Many of these would eagerly seize any opportunity offered them to improve their minds during their enforced idleness, but cannot attend the regular graded schools, because they are not prepared to take up the work at the exact point reached by any particular grade, and because those schools are just on the eve of closing the year's work when they are ready to begin.

This class is quite large in many cities, and those composing it are entitled to the benefits of free schools and really need them more than those children whose parents are able to send them to school at the usual time. Why should not they be accommodated in ungraded summer schools, and helped in the acquisition of such knowledge as may be gained in the limited time at their command?

At Newark, N. J., vacation schools have been maintained for two seasons for a reason different from any of those mentioned above. That reason is stated by Superintendent W. N. Barringer in his report for 1885, as follows:

"In some parts of the city, comparatively but few of the children connected with the public schools are able to leave the city during this vacation. The parents not being able to furnish private instruction for them, they are consequently turned into the street for nine or ten consecutive weeks. I need not tell you that in a large measure the benefits of the school terms are neutralized by the street habits and influences. * * *

"It seems to be settled that it is not best to curtail the summer vacation. Under these circumstances what shall be done with the class of children referred to? * * * Without further discussion, I would recommend the establishment of at least four vacation or summer schools. * * *

"The main object of these schools is to remove the children from street influences and to preserve their school habits, that they may return in proper condition to their regular school work at the opening of the term."

There seems to be no reason founded upon experience for the fear that the continuation of school duties throughout the summer would prove injurious to the health of the pupils or teacher. As to the latter, they themselves are the most competent judges of their physical condition, and no teacher will forego her usual vacation and undertake extra work in the summer when her condition demands rest and quiet.

The special character of summer schools is such that it is not likely that any school children would be kept in the city by their parents solely to attend a summer school; and those children who do not leave the city would certainly be as healthy in school as at home. Indeed, many of them would be far better off in school, as may be readily believed after a comparison of the unwholesome homes of very many of the pupils, and the school building as it is usually constructed with good sanitary arrangements, large rooms, ample windows, and abundant space surrounding all for the circulation of the air.

Since it appears, therefore, that four distinct classes of children would be benefited by the maintenance of vacation schools, and that the classification of the regular schools would be improved by the same means, may it not be hoped that the subject will in future receive more general attention?

SCHOOL BUILDINGS.

It is not possible in the limits of this Report to treat the subject of school architecture with any degree of fulness or with any attention to detail. The following suggestions of a general character seem to possess unusual merit and are worthy of careful consideration:

"Your attention is again called to the necessity for adopting a plan for a model school building—one best adapted to the needs of our system. Many of our buildings have features in the plan of their construction which it would be well to engraft on all plans for new buildings, while they also have objectionable features; and were we to adopt a model building incorporating in its plan all the improvements in our buildings, while excluding their defects, we would yearly make advance in the matter of our school architecture." [Report of Mr. Henry A. Wise, city superintendent, Baltimore, Md.]

"The city must, within a short time, face the necessity of building schools to supplant the many unfit rented buildings which are a discredit to our school system, and to accommodate the large number of children of school age now deprived of educational privileges. When these are built and ready to go into use, our system should be classified into '*grammar*' and '*primary schools*.' * * *

"Primaries should be located in quiet and healthful places, on large, roomy lots, so as to be convenient of access to small children, and with the plan in view of making some school a central or grammar school, into which the higher grades can be concentrated. By having small buildings, and consequently more schools, they would be nearer the homes of small children, and could be reached by them in bad weather. The records

show that many small children are kept from attending schools, in wide-spread districts, on account of the long distances to be travelled to reach them. No primary building should be more than two stories, and only large enough to accommodate about six hundred children.

"In small two-story buildings there is less danger from panic caused by fire or otherwise. There is less danger from contagion, and more comfort and safety to little children, when in smaller groups and separated from the larger ones. Small buildings can be much better and cheaper lighted, sewered, heated, and ventilated than large ones." [Mr. James F. Crooker, superintendent of education, Buffalo, N. Y.]

"I am convinced that the board of education should condense the schools of the city into a few large¹ buildings. There cannot be a strict discipline of pupils, nor any exactness of grade, when the schools are isolated and scattered over the city in groups of two or three. The teachers in these isolated schools may be ever so faithful and efficient, but they work at a very great disadvantage. The pupils are harder to control, being responsible to no principal, and the teachers are forced to have several grades in one room, thereby losing time and force. The proper policy of our city and of every city is to congregate its schools in large buildings of ten or twelve rooms each. Here an efficient principal can enforce a rigid discipline of behavior, and the assistants feel responsible for nothing but the proper teaching. The children can be reduced to grade, thereby putting all of one class of studies under the care of one teacher. Better work, and more evident and satisfactory results in every respect are thereby obtained." [Superintendent Lawton B. Evans, Augusta, Ga.]

"In any case, the character of the school should be determined before the plans for the building are made. In other words, the building should be adapted to the organization of the school; not the organization to the building." [Report of the Superintendent of Public Instruction of Brooklyn, N. Y.]

"As a matter of financial policy, it would certainly be better for the city to borrow, if necessary, the required sum of money, and erect three or four new school-houses, which would be healthy and comfortable, rather than annually expend a considerable amount for the rent of old buildings which are often unhealthy and unsuited for school use. It can scarcely be necessary to repeat what has so often been said in this relation, that rented houses are seldom fit for occupation by public schools, because they are generally deficient in light, ventilation, and space, which are three essential elements for a healthy and successful school. It is therefore clearly our duty, on sanitary as well as financial grounds, to erect new houses for the schools, until the reasonable demand is supplied, rather than to rent old houses for their use." [Report of the School Commissioners of Baltimore, Md.]

PERNICIOUS METHODS OF HEATING SCHOOL-HOUSES.

Though no system of heating yet devised is entitled to unqualified praise, a few methods still employed in many localities deserve emphatic condemnation. The method described as follows by the acting school visitor of one of the Norwalk, Conn., districts is among these:

"Your visitor would most earnestly call attention to the methods of heating some of the rooms, and especially the two rooms of the higher grades. This is done by furnaces in the school-rooms below, and by means of registers in the floor, the air to which is only that which has been made impure and driven to the floor of the lower rooms! It is carbonized poison, heated to be more effective in its work on the scholars who breathe it again, not cooled and cleansed, but warmed into a new power for mischief. Your visitor was not surprised at the great sick-roll of those rooms. And yet these stoves are old, and the fact was mentioned to your visitor by a person who thought that the evil that had been endured for so long might still be borne! It is not at all clear to your visitor that our bracing east winds do not get credit for the weak lungs of so many of our young people, and for the large proportion of short graves in the adjacent venerable burial-ground that might better be given to these stoves which have been doing their deadly work, it may be, for some generations."

Inasmuch as the use of stoves is quite general, not only in the smaller cities, but in the older buildings of the larger cities as well, the reproduction of the following accounts of tests of their operation is not inopportune:

"Several observations have been taken of the temperature at different desks. In the rooms heated by furnaces and steam the variation in temperature is only a few degrees. But in those heated by wood-stoves it is very great. In severe weather, when a very brisk fire has to be kept, the variation is as high as twenty-five degrees. In one room

¹The word "large" is evidently used here in a relative sense. Buildings of ten or twelve rooms would hardly be called "large" except in comparison with those of only two or three rooms, such as are common in the smaller cities. [Ed.]

the pupil nearest the stove was enjoying (?) a temperature of 92° , while one in the opposite corner was comfortable at 67° . Reducing the temperature to 80° the unfortunate at the back part of the room had to sit shivering at 55° . It has been found impossible so to distribute the heat from these stoves that there should not be a variation of at least ten degrees. If pupils in the back part of the rooms are to be kept comfortably warm at a temperature of 63° , those nearest the stove must endure 78° at least, and for an hour or two in the morning much more. If the rooms were larger the pupils would not be brought so near the stove, but in several rooms not more than three feet intervene between desks and stove.

"Again, the temperature of the air at different heights varies greatly. With the thermometer five feet from the floor registering 72° , one placed two feet lower indicated only 64° , a difference of eight degrees in the two feet, while in many of the rooms the floors are about 50° , varying as the air without varies, and seldom rising above 56° . With cold feet and hot heads, the pupils must suffer in their physical health, to say nothing of the impossibility of doing good mental work. Is it any wonder that our attendance is very irregular from illness?" [Mr. C. H. Morss, city superintendent, Portsmouth, N. H.]

"As stated by the best authorities, a school room should be heated in winter at a temperature not above 70° nor below 64° at the height of the head of a person sitting, and the temperature should not vary more than 4° between that point and two inches from the floor, or between any two points within five feet of the floor. To see how our school-rooms are heated we began in December, 1887, a series of tests of the temperature in the new building in the Upper Village.

"The tests were taken in the following manner: A post was set up in front of the second desk back from the stove, another post was set up in front of the desk in the corner opposite the stove, and another in the middle of the room. On each post there were hung three thermometers, one at five feet, one at three feet, and one at five inches from the floor. By this arrangement there was a pupil who sat nearer and one who sat farther from the stove than any thermometer was hung. The readings of each thermometer were recorded six times a day during school hours, viz: at nine, ten, twelve, one, three, and four o'clock, for six days.

"Similar tests were afterwards made in all the rooms occupied by graded schools, with two exceptions. In the other rooms, however, the lower thermometers were hung two inches instead of five inches from the floor. In the rooms heated by furnace the posts were set, one near the door, one in the middle of the room, and one at the corner opposite the door; in some rooms the middle post was omitted.

"The thermometers were selected to read alike when placed side by side. The tests were being made in different rooms from December 21, 1887, to February 9, 1888. * * *

"The result of these tests has surprised teachers who have taught in the same room for several years, and it will doubtless surprise some of the patrons of the school. The tests show that in the space occupied by the pupil, that is, in the lower five feet of room space, and within the area occupied by the seats, there are marked variations of temperature, not only at different heights from the floor, but at different parts of the room at the same height, and also at the same points at different hours of the day. They show that fires should be started in the school-room stoves at least an hour earlier than at present, in order that the rooms may be approximately comfortable at nine o'clock. They show that one thermometer is no test of the temperature of a room, and that two or more are not when hung at the same height from the floor. In the advanced grammar room, for instance, they show that while there was an average difference of less than four degrees between the temperature five feet from the floor at the front and at the same height at the rear of the room, yet there was at each point an average difference of over sixteen degrees between that point and one directly under it two inches from the floor, and a difference of twenty-six degrees between a point five feet from the floor at the front row of seats and one two inches from the floor at the rear row of seats. They show that in this room there was an average difference of ten degrees between the temperature at the height of the head and that at the feet of the pupils when sitting at their desks, and of over sixteen degrees when standing to recite or to work at the black-board. They show that at the height of three feet from the floor there was an average variation from one observation to another, during the hours school was in session, of over seven degrees. A similar fluctuation in temperature will be noticed in all rooms where the heat is regulated or the room ventilated by opening windows or doors. The tests show that the temperature at the feet was much too cold, being an average of fifty-seven degrees in the front of the room, and a little less than fifty-four at the rear. The conditions in the other school-rooms that are heated by stoves are substantially the same. * * *

"In each of seven rooms post 2 was placed in the north-east corner, and the record shows that in each there is a considerable space that is not warmed sufficiently, particularly in

the high-school room. To make matters worse, in this room, the assistant's room, which is small, is shown by observation to be overheated. The change from the warm air of the recitation room to the cold air of the high-school room is a constant menace to the health of the pupil.

"That pupils who sit in these cold corners complain of being cold is not to be wondered at, and why pupils take cold at school is no longer a mystery.

"The buildings in the out districts can be no better. In one we found a difference of forty-four degrees between the temperature at a desk occupied by a pupil and the coldest end of the principal blackboard, at ten o'clock. Where there are such variations and fluctuations in temperature in the space occupied by the pupils as these tests have demonstrated, the method of heating is radically wrong." [Report of the School Committee of Athol, Mass.]

IRREGULARITY OF ATTENDANCE.

If there is any subject upon which there is universal agreement, that subject is the importance of prompt and regular attendance. The evils of irregularity are fully realized by superintendents, and many are the plans suggested for improvement.

Causes of irregularity.—Since it is always necessary to discover the causes of the trouble it is desired to remove in order to apply the proper remedy, the following extracts are given as representing the results of the investigations of a number of well-informed school officers:

Mr. George A. Littlefield, city superintendent, Newport, R. I.: "There is still too much irregularity in the attendance, and the chief cause of it is the readiness with which children obtain permission from their parents to be absent."

Superintendent O. J. Bainum, Olney, Ill.: "It is still a matter of regret that so many parents fail to recognize the importance of sending their children to school regularly. Too frequently children are allowed to remain out of school for the most trivial reasons."

The opinion that the parents of the delinquent pupils are responsible for the greater part of absences from school is also expressed by the chief school officers of Hopkinsville, Ky.; Putnam, Conn.; Hutchinson, Kans.; Athol, Mass.; Vernon, Conn., and Galesburgh, Ill.

A truant officer of North Adams, Mass., during 1887-88, investigated 557 cases of suspected truancy and found that 123 of the number "were children who had started for school and found they were tardy and turned back, fearing that they would be punished, and for that reason preferred to lose the session, when they could bring in an excuse from their parents." Excepting those detained at home through sickness, this class of absentees was larger than any other.

Superintendent L. T. Regan, Morris, Ill.: "Tardiness usually comes from a want of punctual habits, and not from necessity."

Superintendent John Cooper, Leavenworth, Kans.: "The question is often asked, 'Why do some teachers have so much better attendance than others?' The question is answered in the above, namely: One class of teachers make their schools attractive, pleasant places, while the other class make them unattractive, unpleasant, tiresome places. The hour of dismissal is hailed as the most pleasant."

Superintendent Henry A. Wise, Baltimore, Md.: "This steady and normal increase of attendance upon school duties * * * should serve as an incentive to teachers—if incentive be needed beyond the obligation under which they rest to promote the interests of the schools and the well-being of their pupils—to strive to improve by every means in their power the average attendance of their respective classes. Teachers differ very greatly on this subject. Some, without apparent effort, secure a very high average, while others, under similar circumstances, find themselves unable to bring the attendance of the class up to its normal condition. There are many causes which produce this result. It is very common to hear teachers naming circumstances beyond their control as a reason for a very low rate of attendance, forgetting that an allowance has already been made on account of these very circumstances. When the attendance of a class falls below eighty per cent., ordinary reasons can not be given to account for the fact, and the teacher should examine very closely to find whether the fault is in her stars or in herself. There is one reason that I will mention with the hope that the mentioning of it will produce good results. It is the lack of good disciplinary ability on the part of the teacher. This defect will deplete the attendance of a class more surely than measles or small-pox, and the greatest misfortune is that the depletion becomes permanent. It is a fact that children who have a teacher whom they love and respect for her good qualities recover more rapidly from an attack of sickness than those who are more unfortunately situated. Firm, kind, and methodic control of a class wins the respect and good will of the most turbulent and refractory pupil and creates in him a desire to be present at every session of the school."

How irregularity may be decreased.—"Many of our teachers who have had a low per cent. of attendance are not aware what a power they themselves might be in raising the standard of their schools, and in securing punctuality. It is a fact, undeniable, that the most successful teacher is the one who sees her pupils oftenest in their homes. * * * Visit the parents of your pupils, and by so doing you will show that you have a personal interest in each and every one—that *their* interest is *your* interest. Do this, and I believe your per cent. of attendance will be much better in the terms to come than past records have shown." [Superintendent O. W. Collins, Framingham, Mass.]

"The monthly holiday was established by the board at the suggestion of your superintendent; it has been in vogue for nearly a year. The plan is this: All pupils who are perfect in attendance, 95 per cent. in deportment, and reach within three credits of the class average in the monthly examinations are allowed the last day of the school month as a holiday. The advantages are many. In every class is about a third of the scholars who are always behind and need individual attention; there are always some who, from absence, have missed the vital principles of that month's work. This gives the teacher an opportunity to work up the dull pupils, to assist those who have been absent, and it acts as a severe punishment to the boy or girl who, by disorderly conduct or inattention, has not obtained the required per cent. in deportment, and thus loses his or her holiday. At the same time it serves as an incentive for students to work for that holiday. It has been tried as an experiment, and while all the teachers say it is the hardest day in the month, they unite in saying it is of great advantage to the schools and they would not like to see it discontinued." [Superintendent F. P. Russell, San José, Cal.]

"The means for compelling the attendance of pupils at school are as complete as they can well be made. * * * With a certain small class of pupils these means are necessary and effective in securing their attendance; and by the use of these means these children are compelled to stay in school when they would rather be at play or ranging about the street; and these, after a time, often learn to love the school and no longer need the restraint. But with all these appliances for securing school attendance, the chief reliance is the influence of the teacher in making the exercises of the school profitable and pleasing, and the influence of the parents, who desire for their children the best that is within their reach. To these influences, the good attendance is chiefly due." [Superintendent A. P. Marble, Worcester, Mass.]

"Scholars absent more than three days or tardy more than three times in any school month, without satisfactory excuse, may be suspended by the superintendent until the commencement of the next term." [One of the rules for the government of the American (Ga.) schools.]

DISCIPLINE.

The proper discipline of the school-room and the most effective means of attaining it are subjects whose discussion will always interest those whose life is devoted to the training and management of children. Naturally, a goodly portion of each report is given to observations upon the importance of securing discipline of the right sort, and to suggestions as to the attitude of the teacher toward her pupils. Many of these observations and suggestions are reproduced below. They include remarks relating to the disciplinary ability of teachers, the reasons for maintaining discipline, comments upon the appearance of a well-disciplined school, and, finally, suggestions, more or less original, as to effective means of securing the good behavior on the part of children.

"Correct habits are largely the result of proper discipline; therefore, good discipline is the first essential of a good school, and one's ability agreeably to discipline a school properly is the first mark of his fitness for a position at the teacher's desk." [Superintendent William E. Buck, Manchester, N. H.]

"If a teacher, after a fair trial with a class, has to spend much of her time in talking about order, or has to scold, complain, or threaten to keep down noise and disorder, she has mistaken her calling. The first requisite to complete success is perfect control of the pupils. They must be orderly, attentive, and obedient. No matter how intelligent, enthusiastic, and energetic the teacher may be, if these first conditions of perfect control are not provided, all her efforts will be like applying steam to the locomotive when off the track—instead of progress there are only motion, noise, and danger." [Mr. John Burke, senior principal of schools, Newport, Ky.]

"The only object in the visible discipline of a school is to enable the scholars to study and think to the best advantage. Every useless motion or formula should be avoided, and no pupil should be left for an instant unoccupied. Obedience should be prompt and permanent, but the times of motionless quiet in the school-room, and of requiring pupils to sit erect with their hands folded on the desk, have happily passed, and it is now demanded that there shall be, especially in the lowest grades, a natural hum of business, and cheerful, orderly freedom from unnecessary restraint." ["General Suggestions" in the course of study of the Newport (R. I.) schools.]

"The object aimed at in school is, of course, not merely order, but progress. The former is not the end, but it is a means. It is possible to pay more attention to securing the former than the latter. It is possible to insist on such intense order as to interfere with the pupils' progress in learning. But a reasonable degree of order and discipline is essential, and no satisfactory progress can be made without it." [Superintendent William H. Beach, Madison, Wis.]

"As a rule the children are allowed all the liberty consistent with propriety and progress." [Mr. Ulric Bettison, chief superintendent of public schools, New Orleans, La.]

"The nervous and mental activity spent in legitimate work prepares the otherwise restless pupil for the necessary periods of general exercises or exacted repose; and the result is what the schools, with few exceptions, show—a good amount of stir with a minimum of impropriety." [Report of the School Committee of Chelsea, Mass.]

"Teachers have learned that if they provide suitable occupation for their pupils the question of discipline solves itself. More attention has been given to substance; less to form." [Mr. John J. Jennings, acting school visitor, Bristol, Conn.]

"They control children best who induce them to control themselves; but teachers who attempt to govern their schools by a display of authority are not generally the most successful disciplinarians, and they do not do the best work in the instruction of their schools." [Superintendent A. P. Stone, Springfield, Mass.]

"There are pupils in nearly all our schools ready to take advantage of any weakness they may notice. But on the other hand there are a majority of tractable and well-behaved ones, ready and willing to co-operate with the teacher, and make her work pleasant. But the morsel of leaven leavens the whole, and it is the element of mischief and refraction which the teacher should learn to control if she would succeed. Here is where the 'iron hand in the velvet glove' is needed. The supremacy of the teacher should be made manifest, not by punishment, as in olden times, nor by too frequent displays of authority, but by the exercise of firmness united to kindness." [Superintendent S. S. Taylor, St. Paul, Minn.]

"When the teacher has exhausted his or her own governing power and the pupil persists in setting at naught the teacher's authority, the parents or guardians are fully informed through proper notices. First, a 'warning notice' is sent to parents or guardian. If no improvement results from this course, then a 'special notice' is sent. When a 'special notice' is sent to the parent or guardian, the pupil is not permitted to resume his seat until the parent or guardian shall call on the teacher and give satisfactory assurance of obedience and compliance with the rules of the school." [Superintendent John Cooper, Leavenworth, Kans.]

"The more closely each troublesome pupil is studied, the more fully the impulses that move him are understood, and the influences that surround him out of school are known, the more skilfully can the teacher adapt his discipline to the nature with which he has to deal." [Superintendent H. M. Maxson, Attleborough, Mass.]

"As long as children attend school, they should be treated as children and kept in a child-like spirit. It is not wise to treat them as young ladies and gentlemen as long as their character has not sufficiently matured to entitle them to be treated as such. Certain enjoyments, too, such as parties and balls, should be reserved for riper years. With all due regard for the opinions of children on popular subjects, candidly expressed, they should be given no more weight than they deserve." [Superintendent Henry Raab, Belleville, Ill.]

"It is suggested that children who can not get along in one school might do fairly well in another by being removed from their associates, and the committee recommend that power be given the committee by the board to make transfers on trial as a punishment, but not for the convenience of the pupils or to gratify a whim of the parents." [Committee on Visitation, Paterson, N. J.]

"There is a class of children whose presence among other children or classes demoralizes the school and wears out the patience and strength of teachers beyond all reasonable degree of endurance. Many of this class are marked by a vicious spirit, a reckless license and a gross disrespect for just rights and requirements, amounting to unbearable insolence. The time of children and teachers should not be devoted to these, nor should their malicious and unmanageable examples be tolerated, for it is our duty to shield the other children from such evil influences. We do not ask that these be expelled from our schools and sent upon the streets, but we urge that some provision be made to reclaim them, to restrain and regulate their conduct, by placing them in some special or ungraded school under a teacher peculiarly fitted for such service." [Superintendent O. B. Bruce, Lynn, Mass.]

INCORRIGIBLES AND HABITUAL TRUANTS.

School officers in those States in which compulsory attendance laws are enforced encounter difficulties in the discharge of their duties that are comparatively unknown in

other States. Compulsory laws cause the enrolment of large numbers of children whose previous training is chiefly of the kind that fosters vice, and whose surroundings outside the school-room are only such as encourage a distaste for restraint and an utter disregard for authority. All public schools must contend more or less with this class of pupils, but they are naturally more numerous and troublesome in the schools in which the attendance of all children of every class is compelled. They do not attend at all unless they are obliged to do so, and when forced to present themselves at school they take no interest in their studies, seek only to hinder the progress of others, and take advantage of every pretext to absent themselves from their duties. How to manage such children is one of the gravest questions with which school men have to deal. They must not be excluded from the schools entirely, but their influence tends to demoralize better disposed scholars, if instructed in the regular schools. They should not be committed to reformatories or other institutions for criminals, for they are not criminals, and association with vicious characters can only prove detrimental to them.

The most satisfactory means of dealing with incorrigibles of this stamp is believed to be the establishment of "truant schools," under the management of men peculiarly fitted for such work. The following quotations indicate the reasons for such belief:

"In September, 1885, the truant school was established. The design of this school was to provide a place where the habitually truant boy, the mischievous and ungovernable boy, the newsboy, and the bootblack who must have a portion of school time for their work, where all these could be suitably instructed and firmly controlled.

"The good effects of the school were immediately apparent. Habitual truants and the incorrigible were speedily gathered into this school, and punishment and suspension ceased elsewhere. The good influence of this school was not only felt, but it became tangible in reports. In previous years suspensions for inexcusable absence and for misconduct had averaged about 240; in 1884-85 they were 225; in 1885-86 they decreased to 98, and in 1886-87 to 92, while corporal punishment became a thing of the past.

"There can be no question as to the wisdom of the board in establishing this school, nor as to its restraining and reforming power over all the schools of the city." [Superintendent C. B. Thomas, East Saginaw, Mich.]

"As much less complaint of truancy has reached me than in former years, it would seem probable that the existence of the county truant school has exercised a salutary influence, and though truancy is by no means obsolete in this town, I have no hesitation in saying that the school is of great value in restraining it, and trust that the institution may be kept up." [Superintendent T. H. Day, Pittsfield, Mass.]

"I find that since it has been possible for the town to use the truant school it has been much easier to bring the truants into school." [Mr. Charles L. Frink, truant officer, North Adams, Mass.]

"I also desire to call the attention of the board to the demand for some means of separating the incorrigible and demoralizing class of pupils from those who attend school with unobjectionable habits and morals. This should be done without turning them into the street. My recommendation is that a separate school be established for truants and those who require corporal punishment. One teacher could do this work for the present, and it should be one of the most capable and conscientious teachers obtainable. Pupils should be transferred to and from this school in accordance with such regulations as may be established, and a truant officer should be appointed to assist in enforcing these regulations. * * * I believe this measure would be of great benefit to our schools." [Superintendent D. C. Tillotson, Topeka, Kans.]

"I also recommended that we avail ourselves of these provisions of the statutes, and that for this purpose we invite two or more of the neighboring municipalities to join with us in a petition to the county commissioners for the establishment and maintenance of a school to which truants, and in case the Legislature shall give the requisite authority, those pupils 'who persistently refuse to comply with the reasonable rules and regulations of the schools' may be sent for discipline and instruction.

"Another year's observation and reflection have strengthened my conviction that the need of such a school is imperative, and that the best interests of our schools require its establishment. I again respectfully commend the subject to your consideration." [Superintendent Thomas Emerson, Newton, Mass.]

"The number of actual truants in our school is very small, but the difficulty of dealing with them is just as perplexing as if their number were larger. The absence of a suitable institution for the confinement, discipline, and instruction of habitual truants makes a great deal of work for the truant officers. They have no effectual means of inspiring the boy with a wholesome respect for their authority, and thus to enforce his attendance at school, except the fact that if caught he will be returned to school; nor can the committee devise any means to assist the officers in the absence of a truant school, which are not objectionable because of their dangerous results. Boys who play truant are not criminals, and cannot be treated as such. They stay away from school simply

because they do not like the restraint which constant application to study requires. If they should be sent to the State Reform School, or any similar institution, the stigma upon their character may turn them into the very path from which they should be kept.

"At the same time, their absence from school, wandering about the streets, inculcates idleness and shiftless habits, and leaves them to engage in evil practices which may lead to criminal acts. The scholars who attend school and are inclined to truancy, seeing that the efforts of the officers to return absentees to school are vain, become emboldened, and try playing truant themselves, and the result is to extend the evil of truancy among those scholars who are at first inclined to attend school regularly. So long as public officers dawdle with a question of so much public importance as the establishment of truant schools, we shall be without a remedy for this evil." [From the Report of the School Committee of Marblehead, Mass.]

"The confining in reformatories of children between eight and fourteen years, who have committed no crime, but who refuse to obey parents, and allowing them to associate with older children who have been committed for crime, appears to be a very grave matter. On this account very few children are committed each year.

"To remedy this evil it seems to be necessary that a reformatory school should be established, under the direct control of the board, for the discipline, instruction, and reforming of habitual truants and non-attendants. In this school the children should be taught some business or trade, so that when they leave school they will be fairly equipped to gain a livelihood." [Superintendent John Jasper, New York City.]

"No provision has yet been made for truants and incorrigibles. The superintendent, in annual reports and in monthly communications to the board, has urged the necessity of establishing a school where such persons could be taught and trained. The public-school principals have also advocated such a measure. This question is of vital importance, not only on account of those who need special training, but also, and in larger measure, for the sake of all our pupils whose character depends so much upon their association with each other.

"The great majority of children are obedient and well trained; they should not be in danger of contamination by a vicious element. A city home should be established, to which children who need a special training could be sent for instruction and reformation, but not as criminals for punishment. They should be obliged to live there, undergoing a regular system of duties and instruction, subject to rules appropriate to the institution." [Superintendent Clarence E. Meleney, Paterson, N. J.]

"In my opinion, a special school should be established in this city, into which confirmed and persistent truants should be sent and confined for a reasonable length of time, as a punishment for non-attendance at school. Many parents and guardians who fail to properly discipline their children, either from negligence or want of ability, or who have lost control over them, would welcome such an institution and heartily indorse the plan. It should not partake of the character of a penal institution except in the feature of confinement for a reasonable length of time, and children should be admitted only for truancy or refractory conduct in the regular schools. As soon as an inmate could give a satisfactory guarantee of future good conduct and faithful attendance in his regular school, he should be discharged, and taken into a regular school on probation.

"I believe, as I have said in a previous report, that the knowledge, merely, of the existence of such a school, would largely deter truancy.

"Such a school would never become large, and need not incur a great expense, while its benefits to the school system would be immense in the way of discipline, not only to the truant element of the school, but to the whole department.

"But there is another view of this subject to be considered, and of far more seriousness than the mere absence from school of the truant and his educational loss. It is the moral view. Truancy in many cases is the first step toward the walks and haunts of criminals. Many at first well-disposed children are indulged in 'playing the truant' by kind parents, and, occasionally, by careless or indifferent teachers, until they come in contact with the 'street Arabs,' who skulk from place to place watching for an opportunity to pilfer or commit some depredation, and thus become the tyros of State criminals." [Superintendent James F. Crooker, Buffalo, N. Y.]

"Inexcusable absence, tardiness, and truancy are rife in too many of our schools. This last-named evil is still rampant, for our incorrigibles know too well that until a truant school becomes a tangible entity, or the Lawrence Industrial School can take all of Lynn's truants, they are free to defy all law and order. Some of our citizens view this desire for a truant school as a mere sentiment or convenience on the part of teachers and school officers, believing that it is an effort to rid schools and teachers of a few unruly boys, assuming that if schools are attractive and teachers loving and amiable there will be no truants. We can fully assure all such opinioned advisers that if they will give one week of thorough personal experience to this whole matter, with us who know the 'ins and outs' of truancy, they will find that the attractive school and the amiable,

loving teachers, are sweets that truants do not cry for, do not long for. No person unacquainted with the proclivities of these children and their various conditions and circumstances in a city like Lynn, is qualified to ascribe to mere sentiment or convenience any effort of teachers or school officers to suppress truancy. Our city swarms with habitual and incorrigible truants whom parents can not induce or the law oblige to go to school. * * * They are becoming the worst class of juvenile offenders, some figuring as petty thieves, burglars, and vagrants. Not until Lynn, as a city, insists that the county commissioners comply with the statute requirements, will there be a truant school established, unless Lynn is forced to build one in self-defence, and which it well can do with pecuniary as well as great moral benefit." [Superintendent O. B. Bruce, Lynn, Mass.]

"Provision has already been made for the confinement, discipline, and instruction of habitual truants. Is it not equally important that a law be enacted under which a child who attends school, but who persistently violates the rules and regulations necessary to secure the object for which schools are maintained, shall be dealt with in a similar manner? The truant suffers personal loss when out of school, but does not occasion loss to those who attend; while the persistently disobedient and refractory pupil profits little, if any, by being in school, and seriously interferes with the progress of others. In dealing with such pupils at the present time, the only means available as a last resort is to expel them from school, and by so doing make them companions of the truant, thereby defeating the very object sought to be accomplished. A year ago an effort was made to secure a change in the law relating to truancy, so as to include among the classes of children affected by its provisions those who persistently refuse to comply with the reasonable rules and regulations of the school. * * *

"The importance of securing these amendments can not be realized except by persons familiar with the work of schools. It is often the case that a single boy by his repeated acts of disobedience almost monopolizes the time and vitality of the teacher, and thereby deprives the other pupils of the instruction to which they are entitled. Such boys are the *anarchists* of the school community, and should be treated as the worst enemies of its order and welfare; but the means of dealing with them are insufficient. There can be no worse policy than to let them remain where their presence is a constant injury to others. It is hoped that during the coming session of the Legislature the proposed amendments will be adopted, and the incorrigible pupil, as well as the truant, provided with 'a suitable place' where he can receive instruction without interfering with those who are disposed to make good use of their school privileges. * * *

"By statute all cities and towns are required to provide themselves with suitable places for the restraint, discipline, and instruction of truants. In Cambridge, and in many other cities and towns, the almshouse is the place to which truants are sent. But there is a general feeling that an almshouse is not a proper place for the confinement of this class of children. A truant school should be one of rare excellence, and all the surroundings and influences should be helpful. In the management of our truants at the present time there is no cause for complaint, for the superintendent of the almshouse is an exceptional man for such a position. The objections lie in the character of the place, and in the fact that the school is but an adjunct of the institution, and from the nature of the case must be considered of secondary importance." [Superintendent Francis Cogswell, Cambridge, Mass.]

SUBURBAN SCHOOLS.

In many localities the city board of education must, in addition to the management of the city schools, supervise and, to a certain extent, control the schools in the contiguous country districts. As these schools are usually of a rather inferior character, the following from the pen of Dr. A. P. Stone, city superintendent, Springfield, Mass., is pertinent and to the point:

"There is no good reason why the suburban children should not have as good school accommodations as those in the larger centres of population. And the same remark will apply with equal force to their opportunities of instruction. If music, drawing, and penmanship, well-taught, are desirable for the central schools, so must they be also for those in the outlying districts. The fact that such pupils have their homes remote from the city's business activity, with less opportunity for mingling with their fellows, and for social privileges, rather emphasizes their need of the best schools that can be given them. Neither locality nor sparseness of population should interfere with equality of school opportunities. It is injustice to children to curtail their privileges because their schools are small and expensive. The reasonableness of the expense of schools is not to be decided by the cost of a single school; but rather by the average for the whole city or town, with all due allowance for circumstances. The United States mail delivers many letters in small hamlets at an expense many times greater than the cost of the

stamps affixed to such letters; but while that is true in comparatively small communities, it is also true that, in large cities and towns, where the population is massed, the Government derives a revenue from every letter delivered. The department is judged by its average expenditures and receipts. It may cost more to educate a child at Sixteen Acres or at Dry Bridge than in one of our central schools in the city; but the excess of that cost above the average is more than offset by the difference in the cases of the many whose rate is lower than the average."

EVENING SCHOOLS.

In the accompanying table are shown the number of teachers, total enrolment, average attendance, and per cent. of attendance in the evening schools of 148 cities. Of the 684 cities from which returns were received only these report evening schools. The reasons for the universal complaint of irregular attendance in these schools may be readily understood after an inspection of Column 11 of the table, especially if it be remembered that a low percentage of attendance in evening schools indicates a far more rapid decrease than the same percentage in the day schools would show.

The smallest attendance in proportion to enrolment shown by any city is that of Fitchburg, Mass. In explanation of this, the superintendent, Mr. J. G. Edgerly, says in his report:

"A great many persons attended the evening schools for two or three evenings. Their names were placed upon the registers and they were reckoned as members. Some of the schools were in session three months. This accounts for the small average attendance as compared with the whole number."

And in another connection: "The schools have not accomplished as much as their friends anticipated, for they have not been well graded, the attendance has been irregular, and experienced teachers could not be obtained. More system is needed. Each year's experience aids us."

In regard to the explanation that those who attended only two or three evenings were reckoned as members, and that to this fact is due the low percentage, it may be said that such is the rule in the majority of cities, and ought to be in all city schools of every kind whatsoever. If the number of such pupils is large the assumption is warranted that there is something wrong with the school, and there is no reason worthy of a conscientious teacher for "doctoring" the statistics by excluding those who discover in two or three sessions that the school is neither a pleasant nor a profitable place.

There can be no doubt that the principal reason for the particularly unsatisfactory attendance in the case mentioned lies in the fact that "experienced teachers could not be obtained." The very best teachers find it difficult to make evening schools successful, and if skillful and experienced instructors are not obtained the fate of the schools can not be long in doubt. The experience of every city reporting to this Bureau has shown this to be true.

The inexperience of teachers is not always the cause of poor attendance. The conditions that lead to irregularity can not be removed by the most competent instructors, or by the most careful attention to the comfort of the pupils, and it seems to be certain that a high standard of attendance is unattainable in ordinary evening schools open to all applicants, except, possibly, by the strict enforcement of some law similar to that in force in Massachusetts, of which mention is made below.

Reference to the table will show a number of instances in which the percentage of attendance exceeds 75. It is likely, however, that these high averages are almost invariably due to either some arrangement to prevent the enrolment of all but the most studious, or to some very peculiar method of keeping the records.

New Brunswick, N. J., reports the highest ratio of attendance, 87.7. Examination into the methods by which such a percentage was attained shows that a cash deposit is required of each pupil as a guarantee of good behavior and regular attendance. Further investigation shows that though 1,894 children of school age were not even enrolled in either the private or public day schools, only 57, all told, were registered in the evening schools. But these were quite regular in attendance, progressed well in their studies, and no doubt praised the efficacy of the deposit plan in keeping out "undesirable" pupils.

The passage of the "Illiterate minor bill" by the Massachusetts Legislature has had the effect of greatly augmenting the attendance in and importance of evening schools in that State. This bill forbids the employment of any minor over fourteen years of age who can not read and write in the English language, in any town or city in which evening schools are conducted, unless said minor be a regular attendant of a day or evening school. Even with such a law in force it will be seen from the table that but few of the cities and towns of the State have secured note-worthy regularity of attendance, even in those localities in which the statute is supplemented by the deposit plan. At Worcester, the birth-place of the dollar-deposit idea, the ratio is but 46.5.

The schools of Chicopee, Mass., are worthy of distinguished commendation, for in them the instruction appears to be excellent and of sufficient attractiveness to hold the pupils to their work with remarkable steadiness. The deposit plan is in use, but it is probable that the objections to it are largely obviated by the operation of the compulsory law.

The Lawrence, Mass., schools evidently improved during the session of 1887-88, for the last printed report received by this Bureau gave no intimation of the high state of efficiency indicated by the figures for the past year.

TABLE 19.—*Statistics of Teachers, Enrolment, and Attendance in Evening Schools.*

	City or Town.	Number of Teachers.			Number of Pupils Enrolled.			Average Attendance per Evening.			Ratio of Average Attendance to Enrolment.
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	
	1	2	3	4	5	6	7	8	9	10	11
	ARIZONA.										<i>Per ct.</i>
1	Tucson			1	(12)		12				
	CALIFORNIA.										
2	Los Angeles.....	1	0	1	45	0	45	16	0	16	35.5
3	Oakland <i>a</i>	(3)		3	(108)		108				
4	Sacramento.....	1	1	2	145	47	192	(60)		60	31.3
5	San Francisco.....	15	29	44	3,028	329	3,357	1,097	110	1,117	33.3
6	San José.....	3	0	3	(136)		136	(27)		27	19.9
	CONNECTICUT.										
7	Bridgeport <i>a</i>	(1)		1	(72)		72				
8	Hartford.....				(547)		547	(164)		164	39.0
9	Meriden.....	4	4	8	159	50	209	75	27	102	51.0
10	New Britain.....	2	4	6	(224)		224	(78)		78	34.8
11	New Haven.....	15	1	16	702	50	752	167	17	184	24.5
12	Putnam.....	4			144	41	185	(49)		49	26.5
13	Stamford <i>a</i>	(3)		3	(52)		52				
14	Thompson <i>a</i>	(2)		2	(100)		100				
	DELAWARE.										
15	Wilmington.....	0	4	4	108	25	133	50	13	63	47.4
	DISTRICT OF CO- LUMBIA.										
16	Washington.....	(40)		40	(2,018)		2,018	(1,026)		1,026	50.8
	FLORIDA.										
17	Key West <i>a</i>	(1)		1	(25)		25				
	ILLINOIS.										
18	Chicago.....	144	24	168	5,922	1,628	7,550	2,075	563	2,643	35.0
19	Efingham.....	1	1	2	20	12	32	15	10	25	78.1
20	Peoria <i>a</i>	(6)		6	(210)		210				
21	Rockford.....	4	3	7	200	50	250	57	20	77	30.8
	IOWA.										
22	Burlington <i>a</i>	(4)		4	(400)		400				
23	Davenport.....	4	2	6	202	49	251	102	29	131	52.2
24	Des Moines, West...	6	1	7	(237)		237	(94.5)		94.5	39.9
25	Muscatine.....	2	1	3	97	12	109	(58.4)		58.4	53.6
	KENTUCKY.										
26	Covington.....	3	0	3	(65)		65	(40)		40	61.5
27	Louisville.....	7	26	33	(1,315)		1,315	(831)		831	62.4
	MAINE.										
28	Biddeford.....	2	2	4	75	125	200	52	109	161	80.5
29	Lewiston <i>a</i>	(13)		13	(300)		300				
30	Waterville.....	1	1	2							

a Statistics of 1886-87.*b* For 70 sessions; 63 for 50 sessions.

TABLE 19.—Statistics of Teachers, Enrolment, and Attendance in Evening Schools—Continued.

City or Town.	Number of Teachers.			Number of Pupils Enrolled.			Average Attendance per Evening.			Ratio of Average Attendance to Enrolment.
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	
1	2	3	4	5	6	7	8	9	10	11
MARYLAND.										
31 Baltimore.....	(13)		13	(513)		513	(285)		285	55.6
MASSACHUSETTS.										
32 Boston.....	67	70	137	(6,576)		6,576	1,752	845	2,597	39.5
33 Brockton.....	(4)		4	(135)		135				
34 Brookline.....	1	2	3	53	24	77	(23)		28	36.4
35 Cambridge.....	6	15	21	(566)		566	(230)		230	40.6
36 Chelsea.....	2	8	10	(325)		325	(125)		125	38.5
37 Chicopee.....	(29)		29	(435)		435	(310.3)		340.3	78.2
38 Clinton.....	1	5	6	99	86	185	39	33	72	38.9
39 Danvers.....	2	0	2	(65)		65	(32)		32	49.2
40 Dedham.....	1	2	3							
41 Fall River.....	34	71	105	2,040	1,214	3,254	(1,972)		1,972	60.6
42 Fitchburg.....	(48)		48	(622)		622	(62.6)		62.6	10.1
43 Haverhill.....	3	11	14	140	60	200	100	40	140	70.0
44 Holyoke.....	12	23	35	566	219	785	250	114	364	46.4
45 Hyde Park.....	2	1	3	147	23	170	(25)		25	14.7
46 Lawrence.....	18	24	42	631	456	1,090	(872)		872	80.0
47 Lowell.....	18	57	75	1,906	1,463	3,369	842	663	1,505	44.7
48 Lynn.....	14	45	59	331	117	448	143	103	246	54.9
49 Malden.....	5	3	8	140	68	208	93	46	144	69.2
50 Milford.....	1	1	2	61	2	63	(47.3)		47.3	75.1
51 Monson.....	1	0	1	18	12	30	13	8	21	70.0
52 New Bedford.....	4	17	21	767	358	1,125	(293)		298	26.5
53 Newburyport.....	1	5	6	50	43	93	26	23	49	52.7
54 Newton.....				81	110	191	54	61	115	60.2
55 North Adams.....	1	6	7				129	62	191	
56 Northampton.....	3	2	5	(233)		233	(131.3)		131.3	56.4
57 Peabody.....	1	4	5	26	17	43	19	13	32	74.4
58 Pittsfield.....	4	0	4	184	8	192	32.4	3	35.4	24.9
59 Plymouth.....	2	0	2	30	20	50	15	10	25	50.0
60 Salem.....	6	15	21	562	384	946	150	78	228	24.1
61 Somerville.....	(10)		10	(209)		209				
62 Southbridge.....	4	1	5	186	136	322	185	99	284	72.7
63 Springfield.....	8	16	24	594	123	717	206.7	32.1	238.8	33.3
64 Taunton.....	(4)		4	(331)		331				
65 Waltham.....	11	5	16	204	245	445				
66 Warren.....	2	4	6	(259)		259	(162)		162	62.5
67 Watertown.....	1	6	7	115	42	157	47	33	80	51.0
68 Webster.....	4	5	9	110	100	210	90	80	170	81.0
69 West Springfield.....	(5)		5							
70 Westfield.....	3	5	8	100	6	106	35	4	39	36.8
71 Winchester.....	1			26	10	36	16	8	24	66.7
72 Woburn.....	2	3	5	68	13	81	44	9	53	65.4
73 Worcester.....	23	23	46	557	56	613	253	27	280	46.5
MICHIGAN.										
74 Detroit.....	9	3	12	554	135	689	267	77	344	49.9
75 East Saginaw.....	1	0	1	80	0	80	25	0	25	31.2
76 Escanaba.....	1	0	1	20	0	20	15	0	15	75.0
77 Grand Rapids.....	3	1	4	233						
MINNESOTA.										
78 Duluth.....	4	0	4	301	71	372	97	11	108	29.0
79 Minneapolis.....	44	44	88	2,001	653	2,654	(832)		832	31.3
80 St. Paul.....	(39)		39	1,475	371	1,846	(685)		685	37.1
MISSOURI.										
81 St. Louis.....	28	13	41	1,668	144	1,812	953	84	1,042	57.5

a Statistics of 1886-87.

b Average number, 6.

TABLE 19.—Statistics of Teachers, Enrolment, and Attendance in Evening Schools—Continued.

	City or Town.	Number of Teachers.			Number of Pupils Enrolled.			Average Attendance per Evening.			Ratio of Average Attendance to Enrolment.
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	
	1	2	3	4	5	6	7	8	9	10	11
NEBRASKA.											
82	Omaha	1	23	24	714	222	936				
NEW HAMPSHIRE.											
83	Concord	2	1	3	133	18	151	41	9	50	33.1
84	Dover	2	3	5	100	30	130	55	20	75	57.7
85	Manchester	3	8	11	(332)		382	(98)		98	25.7
86	Nashua	4	13	17	(412)		412	(288)		288	69.9
NEW JERSEY.											
87	Camden	6	8	14	200	150	350	100	75	175	50.0
88	Gloucester	(4)		4	(210)		210				
89	Harrison	3	2	5	200	112	312	80	70	150	48.1
90	Jersey City	2	22	24	920	0	920	435	0	435	47.3
91	Millville	4	13	17	432	115	547	370	84	454	83.0
92	Newark	24	37	61	2,310	587	2,897	(1,315)		1,315	45.4
93	New Brunswick	0	3	3	(57)		57	(50)		50	87.7
94	Orange	1	3	4	(159)		159	(77)		77	48.4
95	Passaic	(5)		5	(265)		265				
96	Paterson	11	51	62	(2,177)		2,177	(907)		907	41.7
97	Salem	1	1	2	78	0	78	40	0	40	51.3
98	Trenton	(8)		8	(193)		193				
NEW YORK.											
99	Brooklyn	b (199)		5199	(11,404)		11,404	(4,496)		4,496	39.4
100	Buffalo	14	56	70	854	832	1,736	420	441	861	49.6
101	Cohoes	0	15	15	225	275	500				
102	Long Island City	2	10	12	(475)		475	(242)		242	50.9
103	New York	257	119	375	16,886	6,665	23,531	6,056	2,993	9,049	35.4
104	Rochester	3	7	10	(556)		556	(188)		188	33.8
105	Utica		10	10	290	116	406	120	60	180	44.3
106	Watertown	0	1	1	40	0	40	20	0	20	50.0
107	Yonkers	8	4	12	291	109	400	132	75	207	50.2
OHIO.											
108	Chillicothe	3	2	5	170	35	205	62	20	82	40.0
109	Cleveland	25	6	31	2,063	253	2,326	604.9	74.6	679.5	29.2
110	Delphos	1	0	1	35	25	60	20	5	25	41.7
111	Sidney	3	0	3	30	0	30				
112	Xenia	1	1	2	60	57	117	26.4	21.9	48.3	41.3
PENNSYLVANIA.											
113	Allegheny	7	13	20	691	111	802	474	77	551	68.7
114	Ashland	2	2	4	141	0	141	64	0	64	45.4
115	Beaver Falls	0	1	1	40	0	40	20	0	20	50.0
116	Chester	0	7	7	222	95	317	160	75	235	74.1
117	Dubois	2	0	2	75	0	75	52	0	52	69.3
118	Erie	2	0	2	135	0	135	82	0	82	60.7
119	Harrisburg	2	3	5	191	123	319	35	25	60	18.8
120	Hazleton	1	1	2	87	0	87	35	0	35	40.2
121	Lancaster	5	3	8	2,349	2,401	4,750	(3,108)		3,108	65.4
122	Milton	1	0	1	25	0	25	18	0	18	72.0
123	New Brighton	2	0	2	45	12	57	28	5	33	57.9
124	New Castle	1	0	1	25	0	25	16	0	16	64.0
125	Olyphant	2	0	2	200	0	200	140	0	140	70.0
126	Philadelphia	(341)		341	(16,079)		16,079				
127	Pittsburg	55	0	55	1,800	60	1,860	990	31	1,021	54.9
128	Pittston	0	6	6	160	0	160	120	0	120	75.0
129	Plymouth	3	3	6	350	0	350	200	0	200	57.1
130	Scranton	16	17	33	854	600	1,454				
131	Wilkes Barre	8	4	12	807	0	807	339	0	339	42.0

a Statistics of 1886-87.

b Number at the close of the term, 1886.

TABLE 19.—Statistics of Teachers, Enrolment, and Attendance in Evening Schools—Continued.

	City or Town.	Number of Teachers.			Number of Pupils Enrolled.			Average Attendance per Evening.			Ratio of Average Attendance to Enrolment.
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	
	1	2	3	4	5	6	7	8	9	10	11
RHODE ISLAND.											
132	Bristol.....	2	3	5	74	44	118	(55)		55	46.6
133	Central Falls.....	3	3	6	100	27	127	(38)		33	29.9
134	Cranston.....	1	0	1	46	7	53				
135	Cumberland.....	8	3	11	199	130	329	(152)		152	46.2
136	East Providence.....	2	0	2	60	0	60	33	0	33	55.0
137	Newport.....	0	6	6	59	63	122				
138	Pawtucket.....	13	9	22	(382)		382	(118)		118	30.9
139	Providence.....	49	106	155	1,938	880	2,818				
140	Westerly.....	5	1	6	151	40	191	(94)		94	41.2
141	Woonsocket.....	10	21	31	400	179	579	(260)		260	44.9
VERMONT.											
142	Rutland.....	0	5	5	130	34	164	53	0	53	32.3
VIRGINIA.											
143	Norfolk.....	2	0	2	50	0	50	42	0	42	84.0
WISCONSIN.											
144	Madison.....	4	0	4	43	0	43	38	0	38	79.2
145	Milwaukee.....	40	21	61	2,351	426	2,777	962	211	1,173	42.2
146	Oshkosh.....	1	0	1	(13)		13				
147	Watertown.....	3	0	3	65	0	65	45	0	45	73.8
148	Wausau.....	0	2	2	90	18	108	70	10	80	74.0

CHAPTER VIII.

STATISTICS OF CITY SCHOOL SYSTEMS.

Remarks Relating to School Statistics of Cities—Names of City Superintendents—Statistics of Population and School Enrolment and Attendance (Table 20)—Statistics of Teachers, Accommodations, and Salaries (Table 21)—Statistics of School Property and Receipts (Table 22)—Statistics of Expenditures (Table 23)—Statistics of Public High Schools (Table 24)—List of Cities and Towns from which no Statistics have been Received—Remarks Relating to the General Comparative Statistics—Comparative Statistics of Enrolment, Attendance, Teachers, and Sittings (Table 25)—Summary of Same by States, Geographical Divisions, and Classes according to Population (Table 26)—Remarks Relating to the Comparative Statistics of Property, etc.—Comparative Statistics of Property, Expenses for Tuition, and Receipts from Local Taxes (Table 27)—Summary of Same by States, Geographical Divisions, and Classes according to Population (Table 28).

SCHOOL STATISTICS.

Great improvement in the statistical portions of the reports of superintendents is apparent each year. But many incongruities must be remedied and a much nearer approach must be made to general uniformity before perfection in this regard will be attained. There is no lack of interest in the matter, for a desire is manifest on the part of every superintendent to make his statistics as complete and accurate as possible. The truth is that the frequent discussion of the subject has not yet led to a general agreement as to what items should be reported, or to a full understanding as to how deductions should be correctly made.

As the facts elicited by the statistical forms of inquiry of this Bureau are those which have been settled upon by eminent educationists as being of prime importance, and are thought to be easily obtainable in any city, the following explanations are given of their significance and the methods of determining each, in the hope that a better understanding of the subject and greater uniformity may be secured. Reference to Tables 20 to 24 will show the application to the statistical tables of the facts obtained by the inquiries mentioned. The items are taken up in the order in which they occur in the tables.

Total population of the city or town.—Though the school population is the true basis for all school computations and comparisons, it is often convenient to use the total population to show with what other cities a comparison of the statistics of any city may be equitably made. In other than census years it is seldom that the exact total population can be given, and the figures in this column are generally estimates. They should not be used, therefore, in any precise calculations.

Population between the ages four and twenty-one.—These ages are the limits within which school attendance ordinarily lies. As it includes all who could under any but extraordinary circumstances be expected to apply for admission to the schools, the item has its value, though it lacks some of the elements of importance possessed by the next item. It is not usual that children are sent to school before they are at least five years old, and the school life of the vast majority of persons terminates long before they reach the age of twenty-one. But it was recommended by the National Council of Education in 1885, and it is generally conceded, that the legal (permissible) school age be from four to twenty-one; and considerable value attaches to the number of persons entitled to admission, in the opinion of educational experts, if not according to the laws of all the States. It was also recommended that four to twenty-one be the census age as well, and that the age of each child enumerated be noted, in order that the number of children between any ages could be easily ascertained. This suggestion has produced no tangible result, for it is not yet possible to secure the actual population between four and twenty-one, except in the cities for which that was already the census age.

In order to obtain the desired figures, however, recourse has been had to a method described in a previous report.¹ Briefly stated, the method consists in estimating the popu-

¹ See Education Report 1885-86, p. 23.

lation four to twenty-one upon the basis of the given population of the State census age, and in doing this, the ratio to each other of the two quantities as shown by previous National and State censuses is considered. The actual population four to twenty-one in the few instances in which it has been ascertained has coincided almost exactly with the estimates made in this Office, thus proving the latter to be at least near enough correct for purposes of comparison.

Population between the ages six and fourteen.—These ages were decided by the National Council of Education to be the proper limits for compulsory education. As a uniform basis is necessary in comparing cities of different States, it is believed that this is as satisfactory a basis as could be established. It is certainly a more equitable one than the population four to twenty-one, for it is between six and fourteen that the vast majority of children attend school; the course in the elementary schools, which all but a small proportion of the whole number attend, is usually designed to cover that period. The population six to fourteen is obtained in the same manner as that described in the preceding paragraph.

Number of children of school census age.—For cities in the same States or in different States with similar school ages this item furnishes a fair basis of comparison, but its use under other circumstances should be avoided. The figures, unless marked "estimated," are supposed to be obtained by actual count.

Enrolment in private and parochial schools.—In very few cities or towns are the public schools patronized to the exclusion of all others. The extent of the work done by private schools is well shown by the comparative table (Table 25). These schools should be considered in determining the educational conditions of any community, and it is unfortunate that accurate statistics concerning them can seldom be obtained. No attempt is made to secure anything more than their enrolment, and even that is almost invariably estimated.

It is not intended that the number given under this head should include the students in colleges, normal schools, or other institutions of a grade higher than the average high school.

Total enrolment in public schools.—There seems to be no reason for disagreement with respect to this item. To know the full extent of the influence exerted by a system of schools the number of all those benefited by them in any degree should be recorded. The total enrolment includes all children in attendance during the year without regard to the time of their continuance in school.

Duplicate enrolments caused by promotions, transfers, or re-entry in the same year after temporary absence, must not, of course, be included. As evening schools labor under entirely different conditions, and are usually maintained for those beyond the school age, their statistics should in all cases be kept separate from that of day schools. The "average monthly enrolment," "average number belonging," "number belonging at the end of the year," etc., are frequently used in statistical statements, and would be of undoubted value in the national statistics if it were possible to realize the ideal condition of uniformity. As yet their use is impracticable.

Average daily attendance.—The significance of this item is well known. It is among the most important of the facts desired by the student of school statistics. The "average daily attendance" is the average of the attendance for all the days in the year. This seems quite simple to one unacquainted with the variety of methods used in arriving at that average, but a great many superintendents have not yet adopted the following, which is the usual and probably the best method:

The attendance for one day may be expressed as a mixed number if necessary; for instance, if thirty pupils are present all day, three for one-half day each, and three for one-quarter day each, the attendance for that day may be correctly expressed by $30 + \frac{1}{2} + \frac{3}{4} = 32\frac{1}{4}$. In this suppositional case the attendance for the day would be equivalent to the attendance of one pupil for $32\frac{1}{4}$ days, or to that of thirty-two and one-quarter pupils for one day; it is not, therefore, improper to allude to attendance in terms of "days," as well as in terms of "pupils."

The "total attendance in days (or pupils)" of any school for the year would be the sum of the attendances for all the days. The "total attendance in days (or pupils)" for a system of schools, then, is simply the sum of the like quantities for all the schools, and the "average daily attendance" is the quotient obtained by dividing this "total attendance" by the number of days the schools were required to be actually in session.

The rule here given does not in any way conflict with that in use by State superintendents, who obtain the average daily attendance for an entire State by adding the average daily attendances of all the units of school organization, whether they be cities, districts, or counties. It should be remembered that the city is a unit of organization and in all statistical matters it must be treated as such. The frequent changing of residences with the consequent transfers of pupils from school to school, and the practice of opening new schools in the midst of the school year make it impossible to secure strict accuracy of statistics if each school be considered separately.

In any case, actual presence in the schools only should be considered. Those absent from any cause should not be counted as in attendance.

Number of days schools were taught.—In city systems, almost without exception, all schools are required to be in session for the same length of time. The number of days in the year on which the schools are required to be actually in session should be shown under this head; and this number should be used in obtaining the average daily attendance, even if some of the schools be granted special holidays.

Total attendance in days of pupils of all grades.—This quantity shows the aggregate number of days attended by all pupils in the schools reporting it. The method of calculating it was explained under the head of "average daily attendance." The term is not generally understood, for a great many superintendents report the average daily attendance and the number of days the schools were taught, and yet fail to report this item. In cases of this kind the total attendance was determined in this Office by a simple multiplication.

Greatest number of teachers employed in all schools at any one time.—A great deal of trouble has been experienced in framing a question that will elicit the exact information needed in regard to teachers. The form of the question in the inquiries for this Report was not by any means satisfactory, and will be altered in future inquiries. What it is required to know is the number of regular teachers' places provided. The number should not include substitutes nor those whose time is principally devoted to supervision. "Special teachers" are merely supervisors of particular branches of study and should be classed with the supervising and not the teaching force.

Number of public school buildings.—In the column under this head appears the number of different buildings in actual use for school purposes in each city. The fact that a building is rented should not exclude it from the number; but small "annexes" adjacent to, and belonging to the organization of larger buildings should not be counted.

Number of sittings for study in all public schools.—This number indicates the number of seats available for use in all schools. Double desks should be counted as two seats.

Annual salary of city superintendent.—The words of the heading convey the full meaning intended. It is not desired to know what is paid to school visitors in the absence of a superintendent, nor in case the superintendent has other duties to perform, what proportion of his salary is for supervision. The full amount per annum received by the chief supervising officer in payment of all services is wanted. Its use to superintendents and boards of education is obvious.

Free text-book system.—Unless all pupils are supplied with everything necessary to the prosecution of their school work, it can not be said that the free text-book system prevails. The reply to the question upon this subject should indicate precisely the plan in use.

Value of public property used for school purposes.—This is self explanatory. The value of rented premises has no place here, but unused school buildings and vacant school sites may be properly included. Heating apparatus frequently causes trouble in this connection, for many do not understand its correct classification. When heating and ventilating arrangements are essentially parts of a building, there is no reason why their value should not be included in that of the building, like other permanent fixtures, such as gas-jets, bells, etc. If movable stoves are used, a distinction must be made, and their value must be classed under the head of furniture. Scientific apparatus, including such articles as maps, globes, etc., used as aids to instruction is what is intended to be classed with libraries.

Total value of taxable property in city or town.—The use of this item and the difficulties experienced in its application have been frequently shown in previous Reports. The trouble lies in the different bases of assessment in the various States and in the general unreliableness of the estimates, which are usually made without data sufficient to guarantee reasonable accuracy.

Receipts.—The subdivisions under this head represent the items which occur most frequently in reports of school finances, and which show the most important sources from which school moneys are derived. It must be borne in mind that *all* receipts from each of the several sources should be included under its proper head. All money received from the State treasury, without regard to the name of the fund, should be reported together, for in no two States are the funds distributed in the same way, and no other arrangement than this is practicable when cities of all States are brought together in the same statistical table. The same may also apply to "city appropriations," general appropriations, special appropriations, appropriations for superintendent's salary—all should be included. County school taxes are imposed in some States, and receipts from this source should have a separate place in the financial statements of cities benefited by such taxes. Tuition fees received from non-residents form an important part of the income of some school-boards, and for this reason, as well as to show the extent of outside patronage, this subdivision is useful.

"The total receipts for the year" do not include money borrowed either by negotiating simple loans or by the sale of bonds. As this total may be used in summing up the receipts for a number of years, it will be seen that to include receipts of money borrowed would necessarily lead to duplication and the apparent receipt of more money than was really available for school purposes, for the receipts of a future year will include the funds for the payment of the loans. The balance remaining from the previous year was a part of the receipts of that year, and must not be included in this. "The total amount of funds available during the year" includes both the balance from the previous year and the receipts from loans and bond sales, and must not, therefore, be used to determine the receipts for a series of years.

Expenditures of school moneys.—School expenses are of three kinds: First, permanent expenditures; second, expenses for supervision and teaching; third, current or incidental expenses. These terms are generally understood and need little explanation. There is some likelihood of error, however, in regard to what should be classed under "permanent repairs." Nothing should be included under this head that does not add to the permanent value of the school property. Minor repairs that merely replace loss or restore the buildings to their previous good condition should be considered as current expenses. "The total expenditure for schools" does not include the payment of the principal of loans and bonds, for this expense had already been included in previous totals, and to include the payment of indebtedness incurred by such expenses would only lead to duplication.

It may be well to call the attention of reporting officers to a mistake that is not infrequently noticed, namely, failure to report items of school expense not paid directly by the school treasurer. In certain cities the board of education controls only a portion of the money expended for schools. In some localities the superintendent of schools is considered a city officer, and his salary is paid without passing through the hands of the board of education; in others, janitors of school buildings are neither controlled nor paid by the school authorities; in yet others, all expense for building, repairs, and the like, is met by the city council directly, such expense not appearing on the books of the school board. In reporting school expenditures, all these items should be included, whether paid by the school-board or not. The mere fact that the money was not disbursed by a school officer makes the expense no less a school expense. There is only one way to report school finances so that all cities may be fairly represented upon the same basis, and that is to report all expenses incurred in the maintenance of the schools.

High schools.—The terms used in the high school table are either self-explanatory or have been explained in the preceding paragraphs. The number of students, instructors, etc., shown in that table are not additional to the general statistics, but are included therein.

Names of City Superintendents by whom the Information in Tables 20, 21, 22, 23, and 24 was Furnished.

ALABAMA.

Birmingham, J. H. Phillips.
Eufaula, N. M. Hyatt.
Lively, J. M. Osborn.
Mobile, E. R. Dickson.
Montgomery, S. H. Bartlett.
Selma, J. W. Mabry.
Talladega, _____.
Tuscaloosa, Carleton Mitchell.

ARIZONA.

Tucson, W. W. Gillette.

ARKANSAS.

Fort Smith, N. P. Gates.
Helena, Aaron Meyers.¹
Hot Springs, J. D. Kimbrell.²
Little Rock, J. R. Rightsell.
Pine Bluff, J. W. Parse.²
Texarkana, William Moseley.

CALIFORNIA.

Los Angeles, W. M. Friesner.
Marysville, F. B. Crane.
Oakland, Fred. M. Campbell.

CALIFORNIA—continued.

Sacramento, M. R. Beard.
San Francisco, J. W. Anderson.
San José, F. P. Russell.
Santa Cruz, D. C. Clark.
Santa Rosa, Chas. E. Hutton.
Vallejo, J. R. Whitaker.
Woodland, Geo. Banks.

COLORADO.

Aspen, F. G. Salmon.
Leadville, W. W. Watters.
Pueblo, J. S. McClung.

CONNECTICUT.

Bridgeport, H. M. Harrington.
Bristol, John J. Jennings.
Derby, Edward B. Gager.²
East Hartford, Joseph O. Goodwin.³
Enfield, Geo. W. Winch.⁴
Greenwich, Myron L. Mason.⁵
Hartford, Wm. Waldo Hyde.⁶
Killingly, A. Ames.⁶
Manchester, Dr. O. B. Taylor.⁵
Meriden, J. T. Pettee.
Middletown, W. B. Ferguson.

¹ Secretary of school district.

² Secretary of school board.

³ Secretary board of visitors and acting visitor.

⁴ Chairman board of school visitors.

⁵ Secretary board of school visitors.

⁶ Acting school visitor.

*Names of City Superintendents by whom the Information in Tables 20, 21, 22, 23, and 24 was
Furnished—Continued.*

CONNECTICUT—continued.

Naugatuck, E. C. Gardner.
New Britain, J. N. Bartlett.
New Haven, Samuel T. Dutton.
New London, ———.
New Milford, C. A. Todd.¹
Norwich, N. L. Bishop.²
Plainfield, Rev. S. H. Fellows.¹
Portland, Geo. B. Cleveland.³
Putnam, Rev. F. H. Church.⁴
Rockville, W. B. Foster.
Stafford, Rev. F. L. Batchelder.⁵
Stamford, Edwin L. Brady.⁶
Stratford, A. Wilcoxson.
Thomaston, Geo. D. Ferguson.¹
Thompson, Stephen Ballard.⁷
Torrington, W. A. Cowles.¹
Wallingford, F. J. Heavens.

DAKOTA.

Fargo, E. H. Smith.
Sioux Falls, L. McCartney.

DELAWARE.

New Castle, D. B. Jones.
Wilmington, David W. Harlan.

DISTRICT OF COLUMBIA.

Washington, W. B. Powell.

FLORIDA.

Gainesville, Wm. N. Sheats.⁸
Key West, Robert J. Perry.
Palatka, ———.
Pensacola, N. B. Cook.

GEORGIA.

Americus, John M. Gannon.
Athens, E. C. Branson.
Atlanta, W. F. Slaton.
Augusta, L. B. Evans.
Columbus, A. P. Moity.
Macon, B. M. Zettler.
Rome, B. Neely.
Savannah, W. H. Baker.

ILLINOIS.

Aurora, N. A. Prentiss.
Beardstown, A. C. Butler.
Belleville, Henry Raab.
Belvidere, J. C. Zinser.⁹
Bloomington, Sarah E. Raymond.
Cairo, T. C. Clendenen.
Canton, Wm. B. Hull.
Centralia, S. G. Burdick.
Chicago, Geo. Howland.
Danville, O. E. Latham.
Decatur, E. A. Gastman.
East St. Louis, John B. Lovingson.¹⁰
Edgingham, W. H. Diets.
Elgin, H. F. Derr.
Evanston, H. H. Kingsley.
Freeport, H. S. Webster.¹¹
Galena, O. P. Bostwick.
Galesburg, W. L. Steele.
Jacksonville, Miss Lyde Kent.
Jerseyville, J. Pike.
Joliet, D. H. Darling.
Kankakee, F. N. Tracy.
La Salle, L. A. Thomas.
Lincoln, W. F. Bromfield.
Litchfield, Joel M. Bowlby.

ILLINOIS—continued.

Mendota, William Jenkins.
Moline, W. S. Mack.
Monmouth, Jas. C. Burns.
Olney, O. J. Bainum.
Ottawa, D. R. A. Thorp.
Paris, A. Harvey.
Peoria, N. C. Dougherty.
Peru, R. L. Barton.
Pullman, D. R. Martin.
Quincy, T. W. Macfall.
Rock Island, S. S. Kemble.
Rockford, P. R. Walker.
Springfield, J. H. Collins.
Sterling, A. Bayliss.¹²
Streator, B. B. Lakin.
Waukegan, Wm. E. Toll.

INDIANA.

Anderson, A. J. Dipboye.
Columbus, A. H. Graham.
Crawfordsville, Temple H. Dunn.
Elkhart, D. W. Thomas.
Evansville, J. W. Layne.
Fort Wayne, John S. Irwin.
Goshen, ———.
Greencastle, Robert A. Ogg.
Indianapolis, L. H. Jones.
Jeffersonville, R. W. Wood.
Kokomo, Sheridan Cox.
La Porte, W. N. Hallman.
Lawrenceburg, W. H. Rucker.
Logansport, J. C. Black.
Michigan City, S. E. Miller.
Mt. Vernon, P. P. Stultz.
Muncie, W. R. Snyder.
New Albany, ———.
Peru, Geo. G. Manning.
Richmond, Justin N. Study.
Seymour, W. S. Wood.
Shelbyville, J. C. Eagle.
South Bend, J. Dushane.
Terre Haute, Wm. H. Wiley.
Union City, Jas. R. Hart.
Valparaiso, W. H. Banta.
Vincennes, Edward Taylor.
Washington, W. F. Hoffmann.

IOWA.

Atlantic, J. J. McConnell.
Boone, Geo. I. Miller.
Burlington, Robt. G. Saunderson.
Council Bluffs, Jas. McNaughton.
Creston, H. B. Larrabee.
Davenport, J. B. Young.
Des Moines—east side, Amos Hiatt.
Des Moines—west side, Mrs. L. M. Wilson.
Dubuque, Thos. Hardie.¹
Fort Dodge, Melvin F. Arey.
Iowa City, W. A. Willis.
Keokuk, W. W. Jamieson.
Lyons, H. E. Robbins.
Marshalltown, ———.
Mt. Pleasant, Fred. A. Jackson.
Muscatine, F. M. Witter.
Oskaloosa, Orion C. Scott.
Ottumwa, A. W. Stuart.
Sioux City, A. Armstrong.
Waterloo—east side, R. G. Young.
What Cheer, W. J. Dean.

KANSAS.

Atchison, F. M. Draper.
Clay Centre, Frank J. Baker.
El Dorado, Chas. F. Gates.
Emporia, J. E. Klock.

¹ Secretary.² District superintendent.³ President board of education.⁴ Secretary school board.⁵ Chairman board of school visitors.⁶ Chairman school board.⁷ School visitor.⁸ County superintendent.⁹ Principal.¹⁰ School treasurer.¹¹ Clerk board of education.¹² Superintendent district No. 3.

Names of City Superintendents by whom the Information in Tables 20, 21, 22, 23, and 24 was Furnished—Continued.

KANSAS—continued.

Fort Scott, D. Bemiss.
Hutchinson, John Schurr.
Independence, T. W. Conway.
Kansas City, John W. Furgeson.
Lawrence, E. Stanley.
Leavenworth, John Cooper.
Marysville, J. W. Quay.¹
Newton, J. W. Cooper.
Ottawa, G. I. Harvey.
Parsons, L. Tomlin.
Salina, ———.
Topeka, John M. Bloss.
Wichita, M. Chidester.
Winfield, James H. Hays.

KENTUCKY.

Bowling Green, W. B. Wylie.
Covington, A. T. Wiles.
Dayton, R. M. Mitchell.
Hopkinsville, C. H. Dietrich.
Lexington, John O. Hodges.
Louisville, Geo. H. Tingley, Jr.
Newport, John Burke.
Owensboro, A. C. Goodwin.
Paducah, A. H. Beals.
Paris, D. P. Pratt.

LOUISIANA.

Baton Rouge, Geo. W. Buckner.²
New Orleans, ———.

MAINE.

Auburn, N. H. Woodbury.
Augusta, J. O. Webster.³
Bangor, S. P. Bradbury.⁴
Bath, J. G. Richardson.
Biddeford, Royal E. Gould.
Calais, A. J. Padelford.
Deering, F. E. C. Robbins.
Eastport, C. H. Cummings.⁵
Gardiner, O. B. Clason.
Lewiston, A. M. Edwards.
Portland, Thomas Tash.
Rockland, F. E. Hitchcock.⁵
Saco, J. M. Bailey.
Waterville, W. C. Crawford.
Westbrook, H. K. Griggs.

MARYLAND.

Baltimore, Henry A. Wise.
Frederick, Glenn H. Worthington.
Hagerstown, P. A. Witmer.⁶

MASSACHUSETTS.

Adams, W. P. Beckwith.
Amesbury, F. Savage.⁷
Amherst, J. B. Child.
Arlington, Wm. A. Winn, M. D.⁷
Athol, Edgar V. Wilson.
Attleboro, J. O. Tiffany.
Beverly, Wm. H. Lovett.⁵
Blackstone, Adrian Scott.
Boston, Edwin P. Seaver.
Braintree, Chas. L. Hunt.
Brookton, B. B. Russell.
Brookline, D. H. Daniels.
Cambridge, Francis Cogswell.
Chelsea, Eben H. Davis.
Chicopee, R. H. Perkins.
Clinton, Wm. W. Waterman.

MASSACHUSETTS—continued.

Concord, Wm. L. Eaton.
Danvers, A. P. Learoyd.⁸
Dedham, Guy C. Channell.
Easthampton, F. G. Morris.⁷
Everett, R. A. Rideout.⁹
Fall River, Wm. Connell.
Fitchburg, J. G. Edgerly.
Framingham, O. W. Collins.
Franklin, Geo. B. Dorr.¹⁰
Gloucester, Freeman Putney.
Great Barrington, Geo. K. Holmes.⁷
Greenfield, P. Voorhees Finch.
Haverhill, Albert L. Bartlett.
Hingham, Louis P. Nash.
Holyoke, Edwin L. Kirtland.
Hopkinton, F. I. Brown.
Hyde Park, Richard M. Johnson.⁸
Lawrence, Geo. E. Chickering.
Leominster, I. Freeman Hall.
Lowell, Geo. F. Lawton.
Lynn, O. B. Bruce.
Malden, Chas. A. Daniels.
Marblehead, Wm. D. T. Trefry.¹⁰
Marlborough, ———.
Medford, E. Hunt.
Melrose, J. O. Norris.⁷
Methuen, Wm. M. Rogers.⁷
Middleboro, Edward P. Pitts.
Milford, S. F. Blodgett.
Millbury, I. B. Sayles.
Monson, James Tufts.⁷
Montague, Lucas J. March.⁷
Nantucket, Arthur H. Gardner.
Needham, Emery Grover.⁷
New Bedford, Wm. E. Hatch.
Newburyport, Wm. P. Lunt.
Newton, Thos. Emerson.
North Adams, Anson D. Miner.
North Brookfield, L. Emerson Barnes.⁷
Northampton, George B. Drury.
Northbridge, S. A. Melcher.
Peabody, Thos. Carroll.⁷
Pittsfield, Thos. H. Day.
Plymouth, Chas. Burton.
Randolph, John B. Wren.⁷
Rockland, J. C. Gleason.⁷
Salem, Alfred E. Brown.⁸
Somerville, J. H. Davis.
Southbridge, J. T. Clarke.
Springfield, Thos. M. Balliet.
Stoneham, Sarah A. Lynde.⁵
Stoughton, Winslow Battles.
Taunton, J. C. Bartlett.
Wakefield, Wm. N. Tyler.¹¹
Waltham, Henry Whittemore.
Warren, Edward Ayres.
Watertown, George R. Dwelley.
Webster, E. P. Carter.
West Springfield, A. H. Smith.¹²
Westborough, E. B. Harvey.
Westfield, Henry Fuller.⁵
Weymouth, Gilman C. Fisher.
Winchester, E. Hunt.
Woburn, F. B. Richardson.
Worcester, A. P. Marble.

MICHIGAN.

Adrian, Geo. W. Walker.
Ann Arbor, W. S. Perry.
Battle Creek, L. R. Halsey.
Bay City, J. W. Smith.
Cadillac, A. S. Hall.
Cheboygan, F. O. Wickham.
Coldwater, H. M. Slauson.
Detroit, W. E. Robinson.

¹ County superintendent.² President of parish school board.³ Secretary of parish school board.⁴ School agent.⁵ Secretary of school committee.⁶ County examiner.⁷ Chairman school committee.⁸ Secretary of school board.⁹ Principal of high school.¹⁰ Chairman of school board.¹¹ Secretary *pro tempore*.¹² Chairman of committee.

*Names of City Superintendents by whom the Information in Tables 20, 21, 22, 23, and 24 was
Furnished—Continued.*

MICHIGAN—continued.

East Saginaw, C. B. Thomas.
Escanaba, Kirk Spoor.
Flint, _____.
Grand Haven, Egbert L. Briggs.
Grand Rapids, F. M. Kendall.
Ionia, W. D. Clizbe.
Jackson City, district No. 1, _____.
Kalamazoo, Henry N. French.
Ludington, A. F. Webster.
Marquette, Anna M. Chandler.
Marshall, O. C. Seelye.
Menominee, Jesse Hubbard.
Monroe, J. A. Stewart.
Negaunee, F. D. Davis.
Niles, John D. Schiller.
Pontiac, Ferris S. Fitch.
Port Huron, J. A. Stewart.
Saginaw, E. C. Thompson.
West Bay City, J. E. Lemon.
Wyandotte, L. M. Kellogg.
Ypsilanti, R. W. Putnam.

MINNESOTA.

Anoka, J. H. Cummings.
Brainerd, J. A. Wilson.
Crookston, John Moore.
Duluth, R. E. Denfeld.
Faribault, S. B. Wilson.
Mankato, A. F. Becholdt.
Minneapolis, John E. Bradley.
Red Wing, O. Whitman.
St. Cloud, C. C. Schmidt.
St. Paul, S. S. Taylor.
Stillwater, Frank T. Wilson.
Winona, V. G. Curtis.

MISSISSIPPI.

Jackson, H. J. Fry.
Meridian, A. A. Kincannon.
Natchez, J. W. Henderson.
Vicksburg, H. T. Moore.

MISSOURI.

Butler, J. F. Starr.
Carrollton, W. D. Dobson.
Carthage, S. S. Wells.¹
Chillicothe, I. M. Gross.
Clinton, Chas. B. Reynolds.
Columbia, I. H. Brown.
De Soto, James P. Dougherty.
Hannibal, H. K. Warren.
Independence, Wm. F. Bahlmann.
Jefferson City, Ralph E. Oldham.
Kansas City, J. M. Greenwood.
Lexington, H. D. Demond.
Louisiana, R. B. D. Simonson.
Maryville, E. J. H. Beard.
Mexico, D. A. MacMillan.
Moberly, L. E. Wolfe.
Nevada, W. J. Hawkins.
Pierce City, Elmer E. Norris.
Rich Hill, B. F. Carroll.
St. Charles, G. W. Jones.
St. Joseph, E. B. Neely.
St. Louis, Edward H. Long.
Sedalia, Wm. Richardson.
Springfield, J. Fairbanks.
Washington, B. J. Specking.

MONTANA.

Butte, J. R. Russel.

NEBRASKA.

Beatrice, I. G. Pearse.
Fremont, J. Alva Hornberger.

NEBRASKA—continued.

Grand Island, Robt. J. Barr.
Hastings, J. B. Monlux.
Kearney, Jesse T. Morey.
Lincoln, H. S. Bowers.
Omaha, H. M. James.
Plattsmouth, W. W. Drummond.

NEVADA.

Carson City, H. H. Howe.
Gold Hill, F. M. Huffaker.
Virginia City, F. M. Huffaker.

NEW HAMPSHIRE.

Claremont, Edwin Vaughan.
Concord, L. J. Rundlett.
Dover, Channing Folsom.
Keene, Ira J. Proutry.
Manchester, Wm. E. Buck.
Nashua, O. S. Williams.
Portsmouth, C. H. Morss.
Rochester, Henry Kimball.
Somersworth, _____.

NEW JERSEY.

Atlantic City, L. C. Albertson.
Bayonne, Geo. W. Strieder.¹
Camden, Martin O. Bergen.
Elizabeth, J. Aug. Dix.
Gloucester, J. C. Stinson.
Harrison, J. Dwyer.
Jersey City, Addison B. Poland.
Lambertville, Geo. Pierson.
Long Branch, J. M. Green.²
Millville, J. W. Newlin.
Montclair, Randall Spaulding.
Morristown, W. L. R. Haven.
Mt. Holly, Chas. D. Raine.
Newark, Wm. N. Barringer.
New Brunswick, Charles Jacobus.
Orange, U. W. Cutts.
Passaic, H. H. Hutton.³
Paterson, O. M. Brands.
Phillipsburg, Edwin C. Beers.
Plainfield, Rev. J. L. Hurlbut.
Rahway, Elihu B. Silvers.
Salem, Robt. Gwynne.
Trenton, Frank O. Briggs.⁴
Weehawken, Otto Ortel.⁵

NEW YORK.

Albany, Chas. W. Cole.⁶
Albion, Freeman A. Greene.
Auburn, B. B. Snow.
Batavia, Gardner Fuller.
Binghamton, M. W. Scott.
Brooklyn, William H. Maxwell.
Buffalo, J. F. Crooker.
Canandaigua, H. L. Taylor.
Catskill, James V. D. Ayers.
Cohoes, Chas. F. Merrill.
Corning, A. Gaylord Slocum.
Cortland, Frank Place.
Dansville, F. J. Diamond.
Dunkirk, John W. Babcock.
Ellenville, Ira W. Lawton.
Elmira, G. V. R. Merrill.
Flushing, John H. Clark.
Geneva, W. H. Vrooman.⁶
Gloversville, H. A. Pratt.
Green Island, James Heatly.
Herkimer, A. G. Miller.
Hoosick Falls, John E. Shull.⁷
Hornellsville, W. R. Prentice.
Hudson, J. M. Frost.
Ilion, Laselle H. White.
Ithaca, Luther C. Foster.

¹ Secretary of board of education.

² Principal of schools.

³ Principal of high school.

⁴ President of board of education.

⁵ Superintending principal.

⁶ Acting superintendent.

⁷ Principal.

*Names of City Superintendents by whom the Information in Tables 20, 21, 22, 23, and 24 was
Furnished—Continued.*

NEW YORK—continued.

Jamaica, ———.
 Jamestown, Samuel G. Love.
 Johnstown, Wm. S. Snyder.
 Kingston, Chas. M. Ryan.
 Lansingburg, Edward Wait.
 Little Falls, Edwin C. Ashley.
 Lockport, Charles W. Warren.
 Long Island City, Sheldon J. Pardee.
 Lyons, William Kreutzer.¹
 Malone, D. H. Stanton.²
 Medina, Charles E. Allen.³
 Middletown, A. B. Wilbur.
 Mt. Vernon, Jared Sanford.⁴
 New Rochelle, I. E. Young.⁵
 New York, John Jasper.
 Newburg, R. V. K. Montfort.
 Ogdensburg, Barney Whitney.
 Olean, W. L. MacGowan.
 Oswego, E. J. Hamilton.
 Owego, E. J. Peck.
 Penn Yan, Henry White Callahan.
 Plattsburg, Fox Holden.
 Port Chester, J. W. Diehl.⁶
 Port Jervis, John M. Dolph.
 Poughkeepsie, Edward Burgess.
 Rochester, S. A. Ellis.
 Rome, M. J. Michael.
 Saratoga Springs, E. N. Jones.
 Seneca Falls, L. C. Andrews.
 Sing Sing, J. Irving Gorton.
 Syracuse, Edward Smith.
 Tarrytown, Wm. T. Lockwood.²
 Tonawanda, Frank A. McCoy.
 Troy, David Beattie.
 Utica, Andrew McMillan.
 Waterford, C. V. Cobb.
 Waterloo, A. R. Serven.
 Watertown, Fred Seymour.
 West New Brighton, Chas. E. Surdam.
 White Plains, John P. Moran.⁶
 Yonkers, Charles E. Gorton.

NORTH CAROLINA.

Durham, Edwin W. Kennedy.
 Fayetteville, N. A. Sinclair.
 New Berne, John S. Laws.
 Raleigh, Edward P. Moses.
 Reidsville, Geo. R. McNeill.
 Winston, William A. Blair.

OHIO.

Akron, Elias Fraunfelder.
 Alliance, Charles C. Davidson.
 Ashtabula, I. M. Clemens.
 Bellaire, ———.
 Bellefontaine, Henry Whitworth.
 Bucyrus, F. M. Hamilton.
 Canton, J. H. Lehman.
 Chillicothe, John Hancock.
 Cincinnati, Emerson E. White.
 Circleville, M. H. Lewis.
 Cleveland, L. W. Day.
 Columbus, O. E. D. Barron.⁶
 Dayton, ———.
 Defiance, C. W. Butler.
 Delphos, E. W. Hastings.
 East Liverpool, A. J. Surface.
 Elyria, Henry M. Parker.
 Findlay, J. W. Zeller.
 Fostoria, W. T. Jackson.
 Fremont, W. W. Ross.
 Galion, M. Manley.
 Gallipolis, J. J. Allison.
 Hamilton, L. R. Klemm.
 Ironton, R. S. Page.
 Lancaster, Geo. W. Welsh.
 Lima, J. M. Greenslade.

OHIO—continued.

Mansfield, John Simpson.
 Marietta, C. K. Wells.
 Martin's Ferry, Edwin E. Sparks.
 Massillon, E. A. Jones.
 Middletown, Frank J. Barnard.
 Mt. Vernon, J. A. Shawan.
 Nelsonville, F. S. Coultrap.
 Newark, J. C. Hartzler.
 Norwalk, William P. Comings.
 Painesville, G. W. Ready.
 Piqua, C. W. Bennett.
 Portsmouth, Thos. Vickers.
 Ravenna, ———.
 Salem, M. E. Howe.
 Sandusky, Henry A. Balcum.
 Sidney, P. W. Search.
 Springfield, A. E. Taylor.
 Steubenville, H. N. Mertz.
 Tiffin, I. W. Knott.
 Toledo, H. W. Compton.
 Urbana, A. C. Deuel.
 Van Wert, Daniel E. Cowgill.
 Washington, N. H. Chaney.
 Wooster, W. S. Eversole.
 Xenia, E. B. Cox.
 Youngstown, F. Trendley.
 Zanesville, W. D. Lash.

OREGON.

Astoria, C. W. Shively.⁷
 Portland, T. H. Crawford.
 Salem, S. A. Randle.

PENNSYLVANIA.

Allegheny, John Morrow.
 Allentown, L. B. Landis.
 Altoona, D. S. Keith.
 Ashland, J. H. Michener.
 Beaver Falls, M. L. Knight.
 Bellefonte, David M. Lieb.
 Bethlehem, G. H. Desh.
 Braddock, Edwin Twitmyer.
 Bradford, ———.
 Bristol, Matilda S. Booz.
 Butler, E. Mackey.⁸
 Carbondale, John J. Forbes.
 Carlisle, C. P. Humrich.⁹
 Chambersburg, ———.
 Chester, ———.
 Columbia, S. H. Hoffman.
 Conshohocken, Joseph K. Moore.
 Corry, A. D. Colegrove.
 Danville, W. D. Steinbach.
 Du Bois, Frank Hutton.
 Dunmore, L. R. Fowler.
 Easton, William W. Cottingham.
 Erie, H. S. Jones.
 Greenville, John E. Morris.
 Harrisburg, L. O. Foose.
 Hazleton, David A. Harman.
 Honesdale, Geo. W. Twitmyer.
 Johnstown, T. B. Johnston.
 Lancaster, R. K. Buehrle.
 Lebanon, J. T. Nitrauer.
 Lewistown, ———.
 Lock Haven, Jno. A. Robb.
 McKeesport, Chas. W. Deane.
 Mahanoy City, Wm. L. Balentine.
 Meadville, H. V. Hotchkiss.
 Milton, S. O. Goho.
 Monongahela City, ———.
 Nanticoke, Will S. Monroe.
 New Brighton, E. C. Lavers.
 New Castle, F. M. Bullock.
 Norristown, Jos. K. Gotwals.
 Oil City, C. A. Babcock.
 Olyphant, John Rutledge.³

¹ President of board of education.² Secretary of board of education.³ Principal.⁴ School commissioner.⁵ Principal of public schools.⁶ Clerk of board of education.⁷ County superintendent.⁸ Principal of schools.⁹ Secretary of school board.

*Names of City Superintendents by whom the Information in Tables 20, 21, 22, 23, and 24 was
Furnished—Continued.*

PENNSYLVANIA—continued.

Philadelphia, Jas. MacAlister.
Phoenixville, H. F. Leister.
Pittsburg, Geo. J. Luckey.
Pittston, Robert Shiel.
Plymouth, P. Martin.¹
Pottstown, W. W. Rupert.
Reading, Z. X. Snyder.
Scranton, George W. Phillips.
Sharpsburg, W. T. Noss.
Shenandoah, L. A. Freeman.
South Bethlehem, Owen R. Wilt.
South Easton, S. E. Shull.
Susquehanna, Jas. F. Lannon.²
Tamaqua, Robt. F. Ditchburn.
Titusville, R. M. Streeter.
Tyrone, B. F. Pinkerton.
Warren, A. B. Miller.
Washington, A. G. Braden.
Westchester, S. W. Starkweather.
Wilkes Barre, A. W. Potter.³
Williamsport, S. Transeau.
York, W. H. Shelley.

RHODE ISLAND.

Bristol, J. P. Reynolds.
Burrillville, Rev. A. H. Granger.
Central Falls, Asa H. Nickerson, M. D.
Cranston, Aaron S. Haven.
Cumberland, Robert Murray, Jr.
East Providence, George N. Bliss.
Johnston, W. E. Wilson.
Newport, Geo. A. Littlefield.
Pawtucket, Fred. Sherman.
Providence, H. S. Tarbell.
South Kingstown, Arthur W. Brown.
Westerly, Rev. O. U. Whitford.
Woonsocket, Frank E. McFee.

SOUTH CAROLINA.

Charleston, Henry P. Archer.
Columbia, D. B. Johnson.
Greenville, Wm. S. Morrison.

TENNESSEE.

Chattanooga, H. D. Wyatt.
Clarksville, J. W. Graham.
Jackson, Frank M. Smith.
Knoxville, Albert Ruth.
Memphis, C. H. Collier.
Union City, Price Thomas.

TEXAS.

Austin, John B. Winn.
Brenham, W. H. Flynn.
Brownsville, J. F. Cummings.
Denison, W. D. Gerard.
El Paso, C. Esterly.
Fort Worth, Alex. Hogg.
Galveston, Jacob Bickler.
Houston, W. S. Sutton.
Palestine, J. E. Rodgers.
Paris, C. A. Bryant.
Sherman, Nathan Somerville.
Waco, J. N. Gallagher.

UTAH.

Ogden, Edw'd H. Anderson.⁴
Provo, ———.

VERMONT.

Bennington, Ralph H. Bowles, Jr.
Brattleboro, Albert D. Spaulding.
Rockingham, Geo. A. Brown.
Rutland, Edward L. Temple.
St. Johnsbury, Anne S. May.

VIRGINIA.

Alexandria, Richard L. Carne.
Fredericksburg, E. M. Crutchfield.
Lynchburg, E. C. Glass.
Norfolk, Geo. W. Taylor.
Petersburg, D. M. Brown.
Richmond, Jno. B. Cary.
Staunton, W. W. Robertson.
Winchester, Maurice M. Lynch.

WASHINGTON.

Tacoma, E. P. Young.
Walla Walla, R. C. Kerr.

WEST VIRGINIA.

Charleston, Richard Gaill.
Grafton, U. S. Fleming.
Martinsburg, J. A. Cox.
Parkersburg, W. M. Straus.
Wheeling, W. H. Anderson.

WISCONSIN.

Appleton, A. B. Whitman.
Baraboo, W. J. Brier.
Beloit, T. A. Smith.
Berlin, N. M. Dodson.
Chippewa Falls, C. R. Long.
Fond du Lac, I. N. Mitchell.
Fort Howard, Otis E. Larsen.
Green Bay, Cornelia B. Field.
Janesville, C. H. Keyes.
Kenosha, James Cavanagh.
La Crosse, Albert Hardy.
Madison, Wm. H. Beach.
Menomonee, Stella Lucas.
Merrill, Howard A. Talbot.
Milwaukee, Wm. E. Anderson.
Monroe, C. F. Niles.
Necnah, Robt. Shiells.
Oconto, D. P. Moriarty.
Oshkosh, W. A. Gordon.
Portage, Chas. T. Susan.
Racine, H. G. Winslow.
Sheboygan, Geo. Heller.
Stevens' Point, Frank W. Cooley.
Watertown, C. F. Diebalin.
Waukesha, Geo. H. Reed.¹
Wausau, Chas. V. Bardeen.

WYOMING.

Cheyenne, J. O. Churchill.

¹Principal.

²Secretary of school board.

³Superintendent of third district.

⁴County superintendent.

TABLE 20. — Statistics for 1887-88 of Population and School Enrolment and Attendance in Cities and Towns Containing over 4,000 Inhabitants.

City or Town.	Total Population, Actual or Estimated, in 1887.	Population 4 to 21.	Population 6 to 14.	School Census Age.	Whole Number of Children of School Census Age.			Estimated Enrolment in Private and Parochial Schools.		Whole Number Enrolled in Public Day Schools, Excluding Duplicates.		Average Daily Attendance in Public Day Schools.			Number of Days Published.	Total Attendance in Days of Pupil of all Grades.
					Male.	Female.	Total.	Male.	Female.	Male.	Female.	Total.	Male.	Female.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
ALABAMA.																
1 Birmingham	40,000	4,257	2,169	7-21	1,599	1,662	3,261	300	1,020	1,136	2,156	676	749	1,425	177	251,225
2 Buffalo	4,000	1,585	803	7-21	657	648	1,305	390	(346)	346	346	(223)	(223)	223	181a	39,473
3 Lively	5,500	1,689	861	7-21	638	656	1,294	100	(250)	250	250	(204)	(204)	204	129	24,380
4 Mobile	15,634	4,723	7,981	7-21	(12,000)	(12,000)	12,000	.....	.....	.....	.....	1,890	2,190	4,080	176	718,080
5 Montgomery	25,000	4,723	2,406	7-21	(3,618)	(3,618)	3,618	.....	324	499	1,481	263	(1,326)	1,325	165	218,790
6 Selma	10,000	3,322	1,647	7-21	1,098	1,378	2,476	100	160	164	324	90	100	190	173	107,270
7 Talladega	4,000	822	256	7-21	190	210	400	.....	332	327	679	234	207	441	160	33,915
8 Tuscaloosa	6,000	2,827	1,288	7-21	1,104	832	1,936	.....	.....	.....	.....	.....	.....	.....	.....	70,560
ARIZONA.																
9 Tucson	10,000	.....	.....	6-18	6450	6350	6800	150	305	223	523	(235)	(235)	285	180	51,191.5
ARKANSAS.																
10 Fort Smith*	14,000	2,562	1,353	6-21	1,073	1,074	2,147	.....	798	907	1,705	490	560	1,050	190	199,560
11 Helena	5,000	1,969	1,040	6-21	890	850	1,740	150	233	288	521	124.4	162.6	287	167	47,929
12 Hot Springs*	2,339	2,339	1,257	6-21	(1,960)	(1,960)	1,960	.....	(1,136)	1,136	1,136	(809)	(809)	809	.....	.....
13 Little Rock	27,250	8,667	4,575	6-21	3,638	3,724	7,362	650	1,643	1,846	3,489	1,097.5	1,257.3	2,354.8	173.5	408,558
14 Pine Bluff	14,000	2,920	1,540	6-21	1,185	1,262	2,447	500	747	956	1,703	417	511	928	180	167,240
15 Texarkana	7,000	1,339	698	6-16	397	423	820	31	311	390	701	288	340	628	160	100,489
CALIFORNIA.																
16 Los Angeles	65,000	15,816	7,465	5-17	5,299	5,403	10,692	1,050	3,730	3,606	7,336	(4,489)	(4,489)	4,489	176	788,563
17 Marysville	5,000	1,272	601	5-17	416	466	882	159	255	261	496	(554.5)	(554.5)	554.5	175	62,037.5
18 Oakland*	45,000	16,365	7,724	5-17	5,656	5,676	11,332	1,309	4,207	4,115	8,322	(5,937.3)	(5,937.3)	5,937.3	204	1,211,394.5
19 Sacramento	27,000	8,935	4,217	5-17	3,108	3,085	6,193	1,000	1,891	2,084	3,975	(2,702)	(2,702)	2,702	193	512,882

b Estimated.

a Colored schools were in session 202 days.

* Statistics of 1886-87.

TABLE 20.—Statistics for 1887-88 of Population and School Enrolment and Attendance in Cities and Towns Containing over 4,000 Inhabitants—Continued.

City or Town.	Total Population, Actual or Estimated, in 1887.	Population 4 to 21.	Population 6 to 14.	School Census Age.	Whole Number of Children of School Census Age.			Estimated Enrolment in Private and Parochial Schools.	Whole Number Enrolled in Public Day Schools, Excluding Duplicates.			Average Daily Attendance in Public Day Schools.			Number of Days Published in the Day Schools Taught.	Total Attendance in all Grades.
					Male.	Female.	Total.		Male.	Female.	Total.	Male.	Female.	Total.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
CALIFORNIA—cont'd																
20	300,000	113,100	53,263	5-17	40,735	37,511	78,246	8,013	19,579	19,394	38,973	14,606	14,468	29,074	201	5,843,874
21	16,000	5,840	2,757	5-17	645	793	1,438	708	1,607	1,475	3,082	(2,006)		2,006	200	400,118
22	7,500	2,075	979	5-17				230	385	636	1,231	410	433	843	188	158,466
23	6,000	2,179	1,023	5-17	762	748	1,510	300	564	558	1,122	(690.2)		690.2	189	130,488
24		1,940	916	5-17	671	674	1,345									
25	4,500			5-17				200	344	352	696	(517)		517	173	89,441
COLORADO.																
26	6,000	611	284	6-21	284	237	521	0	284	237	521	(304)		304	168	51,072
27	15,000	2,038	948	6-21	868	871	1,739	500	632	582	1,214	(759)	293	759	160	117,536
28	10,000	1,585	738	6-21	695	658	1,353		541	524	1,065			589	186	104,757
CONNECTICUT.																
29	40,000	12,816	6,016	4-16	(9,045)	822	9,045	775	(6,950)	2,110	6,950	(5,070)		5,070	175	142,450
30	6,500	1,872	879	4-16	(1,321)		1,321		1,250		1,250	(814)		814	200	
31	17,000	5,234	2,457	4-16	(3,694)		3,694	365	(3,176)		3,176	(1,904)		1,904	180	93,420
32	4,250	1,255	589	4-16	(886)		886	30	(902)		902	(519)		519	190	
33		2,502	1,175	4-16	(1,766)	899	1,765	510	(1,116)		1,116	(764)		764	194	181,726
34	8,000	2,670	1,252	4-16	985		1,894	295	(1,233)		1,233	(679)		679	190	
35		13,610	6,388	4-16	814		1,636	400	(7,425)		7,425	(5,036)		5,036	187	170,654
36	7,200	2,318	1,088	4-16	(5,284)	822	1,774	34	(1,518)		1,518	456		456	200	549,200
37	7,100	2,514	1,180	4-16	(5,284)	750	5,284	1,062	1,990	2,110	4,100	1,323	1,423	2,746	2500	
38	23,778	7,487	3,514	4-16	703		1,450	500	472	500	972	340	356	696	6200	
39	7,000	2,055	964	4-16	709		1,450	500								
40	5,000	1,571	738	4-16	(1,109)		1,109	43	(1,040)		1,040	(539)		539	200	119,800
41	20,000	5,713	2,682	4-16	(4,032)		4,032	1,500	(2,062)		2,062	(1,538)		1,538	110	1,963,200
42	80,578	25,250	11,852	4-16	(17,820)	750	17,820	2,042	(12,261)		12,261	(9,966)		9,966	200	1,307,328
43	12,000	3,454	1,621	4-16	(2,438)		2,438	0	(2,040)		2,040	(1,563)		1,563	195	

		4,500	1,145	537	4-16	(808)	808	25	(810)	810	(427)	427	183	78,141
44	New Milford			1,000	4-16	(1,304)	1,304	400	(1,037)	1,037	(772)	772	183	136,680
45	Norwich		2,130	665	4-16	(1,000)	1,000		(900)	900	(772)	772	175	83,825
46	Plainfield	5,214	1,417	656	4-16	(957)	987	12	(813)	813	(586)	586	200	117,200
47	Portland*	4,500	2,298	1,036	4-16	(1,558)	1,558	572	(637)	637	(412,7)	442,7	180	79,686
48	Putnam				5-15					1,800			180	
49	Rockville	7,000		665		(1,000)	1,000	178	(735)	735	(404)	404		
50	Stafford*		1,417	2,086	4-16	(3,137)	3,137		(2,008)	2,008				
51	Stamford*		4,445	839	4-16	611	651	21	(1,144)	1,144	(732)	732	200	146,400
52	Stratford	5,500	1,788	492	5-16	(740)	740	10	(631)	631	(450)	450	180	91,000
53	Thompson*	4,000	1,049	917	4-16	(1,379)	1,379	500	(1,100)	1,100	(430)	430	c180	
54	Thompson*	6,200	1,954	765	4-16	(1,150)	1,150	0	(1,091)	1,091	(030)	0,0	200	125,000
55	Torrington	4,500	1,029	632	4-16	(950)	950		(872)	872			194	
56	Wallingford	5,000	1,346											
DAKOTA.														
57	Fargo	8,201	1,798	890	7-20	(1,243)	1,243	70	597	597			180	
58	Sioux Falls	10,000	1,870	931	7-20	(1,300)	1,300	75	(1,135)	1,135			176	
DELAWARE.														
59	New Castle	4,000	845	401	6-21	353	733	50	(488)	488	(330)	330	206	67,980
60	Wilmington	55,000			6-21				(8,694)	8,694	(5,800)	5,800	195	1,152,755
DISTRICT OF COLUMBIA.														
61	Washington	218,157	74,288	36,442	6-17	24,347	51,500	3,119	16,596	18,254	12,630	13,882	183	4,855,650
FLORIDA.														
62	Gainesville	5,080			6-21			200	432	452	(582)	582	110	64,020
63	Key West*	18,000	6,000	3,000	6-21	2,800	5,000	400	367	342	206	275	120	
64	Palatka	4,000			6-21			114	432	482	(340)	340	132	41,880
65	Pensacola		3,280	1,726	6-21	1,428	2,839	300	578	655	(932)	932	145	133,140
GEORGIA.														
66	Americus	6,000	1,814	948	6-18	(1,276)	1,276		432	437	328	395	185	133,755
67	Athens	10,500			6-18			150	606	650	407	453	182	156,070
68	Atlanta	60,000	18,185	9,501	6-18	5,971	12,794	1,500	3,228	3,775	8,034	3,548	200	1,316,070
69	Augusta	41,000	13,416	7,025	6-18	4,633	9,400	2,000	1,462	1,930	805	1,050	174	322,770
70	Columbus	15,000	5,500	3,067	6-18	1,930	4,130		864	1,264	658	958	198	316,968
71	Macon	15,000	6,870	3,398	6-18	2,259	4,576	400	819	906	(1,362)	1,362	183	249,246
72	Rome*	9,832	1,887	986	6-18	882	1,328	208	283	349	192,6	385,2	171	98,806
73	Savannah	52,827	11,591	6,056	6-18	3,829	8,155	1,000	1,777	2,036	1,478	1,640	190	592,420
ILLINOIS.														
74	Aurora	14,500	4,810	2,349	6-21	2,022	4,168	575	1,187	1,167	(1,706,5)	1,706,5	193	329,351,5

c Some grades were taught 150 days.

b Including holidays.

a Average number.

* Statistics of 1886-87.

TABLE 20.—Statistics for 1887-88 of Population and School Enrolment and Attendance in Cities and Towns Containing over 4,000 Inhabitants—Continued.

City or Town.	Total Population, Actual or Estimated, in 1887.	Population 4 to 21.		Population 6 to 14.		School Census Age.	Whole Number of Children of School Census Age.			Whole Number Enrolled in Public Day Schools, Excluding Duplicates.			Average Daily Attendance in Public Day Schools.			Number of Days Pupils were Taught.	Total Attendance in all Grades.
		4 to 21.	4 to 21.	6 to 14.	6 to 14.		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.		
ILLINOIS—cont'd.																	
75 Beardstown.....	5,000	1,355	662	6-21	570	604	1,174	240	320	335	655	230	245	475	197	93,575	
76 Belleville.....	16,500	7,760	2,813	6-21	2,459	2,532	4,991	920	1,301	1,105	2,415	230	245	475	200	413,597	
77 Belvidere.....	4,000	747	231	6-21	1,198	212	410	25	1,688	1,159	3,302	520	531	1,051	195	411,978	
78 Bloomington.....	25,377	7,599	3,711	6-21	3,376	3,208	6,584	353	7,720	7,707	15,427	520	531	1,051	160	168,176	
79 Cairo.....	14,000	3,722	1,818	6-21	1,591	1,634	3,225	365	519	540	1,059	405	383	788	180	141,840	
80 Canton.....	5,000	2,177	1,063	6-21	1,982	904	1,886	70	585	508	1,093	395	388	783	165	129,288	
81 Centralia.....	5,000	230,400	112,510	6-21	100,505	99,126	199,631	652,987	44,198	45,380	89,578	1,033	388	66,826	194	13,042,718	
82 Chicago.....	802,651	4,897	2,391	6-21	2,262	1,981	4,243	400	1,230	1,236	2,465	1,083	1,076	2,159	195	344,955	
83 Danville.....	11,436	4,487	2,152	6-21	1,910	1,909	3,819	50	1,008	1,055	2,063	962	945	1,907	177	379,498	
84 East Saint Louis.....	16,000	4,408	2,152	6-21	1,910	1,909	3,819	50	1,008	1,055	2,063	962	945	1,907	200	369,655	
85 East Saint Louis.....	16,000	4,408	2,152	6-21	1,910	1,909	3,819	50	1,008	1,055	2,063	962	945	1,907	200	369,655	
86 Effingham.....	15,000	4,230	2,065	6-21	1,807	1,858	3,665	655	1,114	1,102	2,216	200	250	450	190	90,000	
87 Elgin.....	7,000	1,959	956	6-21	825	872	1,697	300	529	454	983	396	372	768	190	316,920	
88 Evanston.....	7,000	1,959	956	6-21	825	872	1,697	300	529	454	983	396	372	768	190	316,920	
89 Freeport.....	9,243	3,663	1,763	6-21	1,521	1,653	3,174	443	792	774	1,566	1,139	372	1,513	196	223,811.2	
90 Galena.....	7,000	2,381	1,163	6-21	988	1,073	2,063	443	478	473	951	386	372	768	190	316,920	
91 Galesburg.....	16,500	5,576	2,722	6-21	2,273	2,558	4,831	500	815	890	1,705	336	372	708	175	129,086	
92 Jacksonville.....	12,000	5,509	2,690	6-21	2,367	2,406	4,773	600	815	890	1,705	336	372	708	175	129,086	
93 Jerseyville.....	4,000	1,289	630	6-21	550	567	1,117	60	354	338	742	336	372	708	175	129,086	
94 Joliet.....	22,500	8,018	3,915	6-21	3,424	3,523	6,947	900	1,360	1,493	2,853	941	966	1,907	198	372,796	
95 Kankakee.....	7,000	3,086	1,507	6-21	1,264	1,410	2,674	651	565	503	1,068	387	383	770	193	141,616	
96 LaSalle.....	11,634	5,217	2,517	6-21	2,360	2,160	4,520	663	423	467	890	312	330	732	193	146,650	
97 Lincoln.....	7,000	3,305	1,617	6-21	1,322	1,548	2,870	400	573	594	1,167	347	493	840	193	153,112	
98 Litchfield.....	6,875	2,017	985	6-21	840	908	1,748	250	569	591	1,160	371	405	776	170	131,492	
99 Mendota.....	3,187	911	459	6-21	418	397	815	45	312	298	610	258	237	495	185	97,508	
100 Moline.....	10,601	3,656	1,785	6-21	1,552	1,614	3,168	0	967	1,046	2,013	455	528	983	175	271,250	
101 Monmouth.....	6,000	1,562	769	6-21	660	705	1,365	0	490	568	1,058	455	528	983	181	150,927	
102 Olney.....	4,129	1,635	799	6-21	633	784	1,417	0	546	583	1,129	388	423	811	198	146,881	
103 Ottawa.....	10,000	3,496	1,707	6-21	1,566	1,463	3,029	60	797	717	1,514	676	580	1,256	198	232,036	
104 Paris.....	4,800	1,538	751	6-21	664	669	1,333	60	557	550	1,107	720	580	1,300	184	132,411.	

105	Peoria*	40,000	13,842	6,759	6-21	5,690	6,304	11,594	1,500	3,186	3,452	6,638	.....	894,357
106	Peru	7,000	.....	.....	6-21	.....	.....	.....	550	400	500	900	.....	200
107	Pulman	.....	.....	.....	6-21	.....	.....	.....	2,000	621	679	1,300	.....	191
108	Quincy	27,428	11,497	5,614	6-21	4,832	5,130	9,962	2,150	1,811	1,911	3,752	800	157,639
109	Rock Island	12,000	4,415	2,156	6-21	1,919	1,376	3,835	1,065	1,065	1,129	1,374	1,204	457,072
110	Rockford	21,535	6,942	3,350	6-21	2,692	3,323	6,805	2,000	1,661	1,821	3,482	1,713	303,201
111	Springfield	21,394	8,659	4,228	6-21	3,643	3,860	7,503	2,000	1,596	1,665	3,261	1,254	501,948
112	Sterling (Dist.No.3)	.....	967	4,272	6-21	411	427	888	600	298	338	638	1,306	479,160
113	Streator*	3,861	3,861	1,885	6-21	1,713	1,632	3,345	456	1,010	1,042	2,052	731	96,423
114	Waukegan*	4,500	2,016	985	6-21	(1,747)	.....	1,747	60	354	396	730	382.2	290,200
INDIANA.														
115	Anderson	6,000	1,513	744	6-21	676	614	1,320	150	364	409	773	.....	180
116	Columbus	7,000	2,465	1,212	6-21	1,067	1,084	2,151	.....	624	634	1,258	571	193,940
117	Crawfordsville	8,000	2,710	1,332	6-21	1,194	1,170	2,364	.....	590	679	1,269	509	169,560
118	Ellettsburg	11,000	3,440	1,691	6-21	1,543	1,458	3,001	250	1,045	1,030	2,075	777	295,035
119	Evansville	42,000	18,483	9,264	6-21	7,977	8,471	16,448	1,361	3,085	3,197	6,285	4,827	924,371
120	Fort Wayne	30,850	11,787	5,793	6-21	5,034	5,249	10,283	3,600	1,964	2,078	4,042	1,653	604,710
121	Goshen	6,000	.....	.....	6-21	.....	.....	.....	1,000	917	906	1,826	630	226,880
122	Greencastle	5,000	2,128	1,046	6-21	957	900	1,857	225	421	452	873	(671.8)	118,908.6
123	Indianapolis	180,000	50,938	25,635	6-21	23,404	22,637	44,441	1,763	(15,256)	928	15,256	11,346.6	2,076,552
124	Jeffersonville	7,000	4,613	2,282	6-21	1,939	2,112	4,661	362	594	614	1,873	692.3	237,455
125	Kokomo	10,000	1,913	2,910	6-21	851	815	1,669	40	594	614	1,208	789	134,253
126	La Porte	10,000	4,373	2,451	6-21	1,795	2,024	3,819	150	563	641	1,204	542	193,640
127	Lawrenceburg	6,000	2,019	2,993	6-21	876	885	1,761	361	361	376	737	601	108,180
128	Logansport	15,283	4,717	2,318	6-21	1,976	2,139	4,115	700	978	1,043	2,021	852	1,593
129	Michigan City	10,000	3,250	1,697	6-21	1,402	1,433	2,835	550	592	597	1,019	779	286,743
130	Mount Vernon	7,000	2,680	1,317	6-21	1,201	1,034	2,238	200	510	557	1,077	378	131,905
131	Muncie*	.....	2,295	1,112	6-21	(2,028)	.....	2,028	.....	630	657	1,287	933	130,500
132	New Albany	.....	8,837	4,313	6-21	3,901	3,806	7,710	600	1,535	1,585	3,121	1,158	173,538
133	Peru	8,000	2,252	1,107	6-21	985	963	1,953	275	579	588	1,167	408	411,480
134	Richmond	17,000	6,826	3,535	6-21	2,922	3,033	5,965	865	1,165	1,378	2,543	839	163,020
135	Seymour	6,000	1,879	923	6-21	(1,639)	.....	1,639	300	511	565	1,016	378	360,450
136	Shelbyville	6,000	1,851	906	6-21	(1,609)	.....	1,609	100	436	538	974	752.3	178
137	South Bend	22,093	7,913	3,859	6-21	3,517	3,387	6,904	800	1,115	1,265	2,330	802	133,912
138	Terre Haute	35,000	15,407	7,572	6-21	6,840	6,602	13,442	600	2,318	2,416	4,734	1,805.5	180
139	Union City	4,000	1,059	520	6-21	462	461	923	650	270	307	577	210	321,379
140	Valparaiso	6,500	2,715	1,335	6-21	1,221	1,148	2,369	450	447	427	874	396	671,292.6
141	Vincennes	11,237	3,606	1,772	6-21	1,559	1,587	3,146	800	620	541	1,161	441	71,280
142	Washington	5,000	2,036	1,000	6-21	890	886	1,776	310	510	522	1,032	755	119,475
IOWA.														
143	Allamette	4,000	1,397	687	5-21	656	644	1,300	.....	(1,172)	620	1,172	(787.7)	175
144	Boone	7,124	1,431	703	5-21	621	710	1,331	580	580	620	1,200	510	137,847.5
145	Burlington*	.....	8,563	4,210	5-21	3,878	4,088	7,966	800	(1,454)	620	1,200	970	174,600
146	Council Bluffs	30,000	8,785	4,319	5-21	4,074	4,098	8,172	450	1,523	1,614	3,137	2,900	556,800
147	Creston	8,000	2,493	1,226	5-21	1,120	1,200	2,320	250	1,523	1,614	3,137	1,005	416,892
148	Davenport	28,000	10,012	4,922	5-21	4,453	4,860	9,313	1,200	2,259	2,247	4,506	1,603	218,862

* Statistics of 1886-87.

a Part of city.

b Includes students in commercial and business colleges.

c In 1880.

d Population of entire city.

TABLE 20.—Statistics for 1887-88 of Population and School Enrolment and Attendance in Cities and Towns Containing over 4,000 Inhabitants—Continued.

City or Town.	Total Population, Actual or Estimated, in 1887.	Population 4 to 21.	Population 6 to 14.	School Census Age.	Whole Number of Children of School Census Age.			Estimated Enrolment in Private and Parochial Schools.		Whole Number Enrolled in Public Day Schools, Excluding Duplicates.		Average Daily Attendance in Public Day Schools.		Number of Days Pupils Taught.	Total Attendance in Days of Pupils of all Grades.
					Male.	Female.	Total.	Male.	Female.	Male.	Female.	Male.	Female.		
IOWA—continued.															
Des Moines, East...	18,000	5,103	2,511	5-21	2,166	2,586	4,752	500		1,791	1,788	(2,323.3)		176	408,866
Des Moines, West...	26,000	6,927	3,406	5-21	2,998	3,446	6,444	820		1,895	2,123	(2,726.3)		176	482,200
Dubuque.....	30,000	11,035	4,435	5-21	4,863	5,421	10,284	2,600		1,934	2,045	1,412	1,530	200	594,400
Fort Dodge.....	5,000	1,782	876	5-21	816	842	1,658	130		511	538	362	388.7	175.5	131,777.8
Iowa City.....	7,000	3,753	1,860	5-21	1,649	1,870	3,519	500		1,120	1,240	(1,038)		190	197,220
Keokuk.....	14,000	5,100	2,507	5-21	2,294	2,450	4,744	500		1,120	1,240	(1,038)		190	335,160
Lyons.....	5,500	2,051	1,003	5-21	920	988	1,908	300		450	510	300	350	200	130,060
Marshalltown.....	10,500	2,695	1,325	5-21	1,240	1,267	2,507	70		925	1,008	702	720	176	250,272
Mount Pleasant.....	5,000	1,394	641	5-21	595	618	1,213	380		423	468	(631.6)		177	111,793.2
Muscatine.....	12,000	3,005	1,477	5-21	1,380	1,415	2,795	300		1,933	1,963	1,005	1,005	180	251,460
Oskaloosa.....	8,000	1,943	953	5-21	875	937	1,812	16		767	810	(1,307)		177	177,885
Ottumwa.....	14,000	3,161	1,554	5-21	1,440	1,500	2,940	100		1,180	1,277	750	893	190	312,170
Sioux City*.....	20,000	9,324	4,584	5-21	4,435	4,233	8,668	200		1,600	1,662	1,000	1,100	186	330,600
Waterloo, East Side	4,000	1,472	727	5-21	670	706	1,376	200		457	423	(482.8)		177	85,447
What Cheer.....	5,000	1,371	674	5-21	672	603	1,275	0		456	525	(646)		176	113,844
KANSAS.															
Atchison.....	25,000	6,183	3,087	5-21	(5,742)	803	5,742	1,000		(2,123)	597	(1,702)		156	265,512
Clay Centre.....	7,000	1,656	827	5-21	735		1,658	0		530	530	357	374	180	131,580
El Dorado.....	6,000	1,484	741	5-21	700	678	1,378	80		530	549	358	376	168	117,440
Emporia.....	12,000	2,992	1,403	5-21	1,273	1,505	2,778	80		(1,650)	549	1,291	1,291	175	225,925
Fort Scott.....	11,000	3,811	1,902	5-21	(3,539)	733	3,539	100		1,260	1,522	(1,291)		180	218,960
Hutchinson.....	9,912	1,622	810	5-21	773	783	1,556	125		679	783	(1,772)		180	184,464
Independence.....	5,400	1,676	835	5-21	696	880	1,576	300		462	520	474	550.8	178	184,464
Kansas City*.....	21,486	10,036	5,009	5-21	4,081	5,233	9,319	630		1,848	2,022	1,106	1,233	160	161,860
Lawrence.....	12,000	3,924	1,959	5-21	1,751	1,893	3,644	300		1,085	1,176	826	837	160	252,040
Leavenworth.....	31,210	8,122	4,054	5-21	3,790	3,752	7,542	2,100		1,664	1,779	1,554	1,683	172	551,604
Marysville*.....	.....	997	483	5-21	463	430	893	.....		266	268	.....	.....	130	73,720
Newton.....	8,339	2,055	1,026	5-21	913	995	1,908	80		734	719	473	476	171.5	162,523

176	Ottawa.....	8,070	2,600	1,328	5-21	1,204	1,266	2,470	45	750	787	540	577	1,117	190	201,050
177	Persons*.....	8,000	2,415	1,206	5-21	1,100	1,143	2,243	330	400	926	500	550	1,050	170	178,500
178	Saline*.....	8,000	2,051	1,024	5-21	937	1,498	1,995	250	590	640	439	481	890	180	165,674
179	Tipton*.....	45,000	11,840	5,910	5-21	5,214	5,780	10,994	1,000	2,681	2,857	1,874.4	2,014.4	3,858.8	180	690,984
180	Winfield.....	32,000	8,815	4,400	5-21	4,006	4,000	8,186	.....	2,217	2,419	1,252	1,364	2,618	172	490,032
181	Winfield.....	7,500	2,658	1,027	5-21	(1,911)	.....	1,911	50	628	803	423	523.6	932.6	170	161,942
KENTUCKY.																
182	Bowling Green.....	8,500	2,465	1,246	6-20	.....	1,995	1,995	400	(1,148)	1,148	.....	(784)	784	196	153,064
183	Covington.....	35,000	14,238	7,205	6-20	5,890	5,617	11,537	1,260	(3,879)	3,879	270	287	2,890	200	111,400
184	Dayton.....	5,000	1,720	869	6-20	760	632	1,392	400	327	309	636	537	537	200	55,000
185	Hopkinsville*.....	25,000	7,838	3,961	6-20	422	479	9,901	125	329	342	204	240	414	200	83,800
186	Lexington*.....	150,000	40,453	20,232	6-20	3,170	3,170	6,340	300	1,134	1,228	2,362	.....	.....	200	.....
187	Louisville.....	28,500	10,453	5,282	6-20	4,335	4,123	8,458	900	11,024	10,306	7,938	7,339	13,277	204	3,116,503
188	Newport.....	8,500	2,772	1,401	6-20	1,094	1,149	2,243	200	1,590	1,640	3,230	1,243	2,561	200	512,200
189	Owensboro.....	20,000	5,962	3,013	6-20	2,328	2,496	4,824	150	658	753	1,411	474	1,024	188.5	182,040
190	Paducah.....	5,600	1,622	819	6-20	709	.....	1,312	.....	311	351	1,916	581	779	191	297,853
191	Paris.....	.....	.....	.....	6-20	.....	.....	.....	.....	.....	.....	662	221	454	200	90,800
LOUISIANA.																
192	Raton Rouge*.....	12,000	.....	.....	6-18	.....	.....	.....	.....	160	199	140	130	270	115	31,050
193	New Orleans.....	243,101	99,008	51,873	6-18	34,131	35,000	69,131	17,000	12,504	13,145	25,649	8,149	15,761	182	2,865,502
MAINE.																
194	Anburn.....	13,000	3,205	1,513	4-21	1,585	1,620	3,205	0	(1,578)	1,578	.....	(1,367)	1,367	180	246,060
195	Augusta.....	10,500	2,542	1,200	4-21	(2,542)	.....	2,542	60	(1,723)	1,723	.....	(1,067)	1,067	175	182,447
196	Bangor.....	17,000	5,288	2,497	4-21	(5,288)	.....	5,288	200	(3,014)	3,014	.....	(2,669)	2,669	176	403,744
197	Bath.....	7,875	2,583	1,219	4-21	(2,583)	.....	2,583	.....	(1,775)	1,775	.....	(1,499)	1,499	204	305,796
198	Biddeford.....	15,000	4,396	2,075	4-21	(4,396)	.....	4,396	600	772	748	.....	625	1,284	175	214,700
199	Calais.....	7,000	2,500	1,180	4-21	1,200	1,300	2,500	150	800	1,000	1,820	900	1,500	180	270,000
200	Deering.....	6,000	1,299	618	4-21	(1,299)	.....	1,299	.....	(750)	750	.....	(655)	655	198	129,690
201	Eastport.....	6,000	1,870	883	4-21	912	958	1,870	30	572	603	379	453	832	186	154,752
202	Gardiner.....	5,500	1,421	671	4-21	691	730	1,421	.....	382	437	367	421	783	176	139,421
203	Leviston*.....	22,000	6,388	3,016	4-21	(6,388)	.....	6,388	1,300	(2,213)	2,213	.....	(2,100)	2,100	187	329,700
204	Portland.....	41,000	11,834	5,887	4-21	(11,834)	.....	11,834	100	3,608	2,732	2,785	1,845	4,630	190	875,700
205	Rockland*.....	7,755	2,275	1,074	4-21	(2,275)	.....	2,275	.....	(902)	902	.....	(443)	443	155	.....
206	Saco.....	6,500	1,660	779	4-21	(1,660)	.....	1,660	300	(1,134)	1,134	.....	(1,003)	1,003	185	153,355
207	Waterville.....	7,409	2,490	1,149	4-21	(2,490)	.....	2,490	.....	450	489	.....	.....	.....	180	.....
208	Wesbrook.....	6,500	2,200	1,039	4-21	(2,200)	.....	2,200	8	450	489	.....	.....	.....	.....	.....
MARYLAND.																
209	Baltimore.....	400,000	106,790	52,235	6-21	45,250	47,250	92,500	.....	(53,697)	53,697	16,975	17,009	33,681	203	6,837,587
210	Frederick.....	8,000	1,749	856	6-21	765	750	1,515	375	445	400	320	235	605	148	89,500
211	Hagerstown.....	12,000	4,364	2,135	6-21	2,090	1,690	3,780	200	(1,401)	1,401	.....	(1,015)	1,015	162	164,430

α Ungraded schools were in session but 133 days.

* Statistics of 1880-87.

TABLE 20. — Statistics for 1887-88 of Population and School Enrolment and Attendance in Cities and Towns Containing over 4,000 Inhabitants—Continued.

City or Town.	Total Population, Actual or Estimated, in 1887.	Population 4 to 21.	Population 6 to 14.	School Census Age.	Whole Number of Children of School Census Age.			Estimated Enrolment in Private and Parochial Schools.	Whole Number Enrolled in Public Day Schools, Excluding Duplicates.			Average Daily Attendance in Public Day Schools.			Number of Days Pupils Were Taught.	Total Attendance in Days of Pupils of all Grades.
					Male.	Female.	Total.		Male.	Female.	Total.	Male.	Female.	Total.		
															6	7	8	9	10	11	12	13	14	15	16	17
MASSACHUSETTS.																
212 Adams	9,500	3,394	1,564	5-15	(1,961)	800	1,961	0	(2,009)	550	2,009	390	(1,462)	1,462	195	141,943.5
213 Amesbury	9,200	2,425	1,108	5-15	601		1,401	451	400		950			790	6185	92,748
214 Amherst	4,200	1,064	490	5-15	(615)		615	110	(745)		745			524	177	
215 Arlington *	4,800	1,653	762	5-15	(955)		955		(963)		963			810	200	
216 Athol	5,000	1,367	630	5-15	(790)		790		(936)		936			682	175	
217 Attleborough	7,100	2,115	974	5-15	(1,222)		1,222	25						944		119,350
218 Beverly	9,186	2,914	1,343	5-15	(1,684)		1,684	15	(1,596)		1,596			1,313	185	174,613
219 Blackstone	5,500	1,883	863	5-15	(1,088)		1,088	0	(1,129)		1,129			699	190	255,722
220 Boston	407,024	125,628	57,883	5-15	(72,590)		72,590	7,882	34,733	31,049	65,782	(51,692)		51,692	202	124,555
221 Braintree	4,100	1,198	553	5-15	(693)		693		(802)		802			564	195	109,980
222 Brockton *	21,000	6,133	2,826	5-15	(3,514)		3,514	490	(4,122)		4,122	(3,201)		3,201	200	640,200
223 Brookline	9,500	3,075	1,417	5-15	(1,777)		1,777	150	(1,886)		1,886	(1,425)		1,425	200	285,000
224 Cambridge	62,000	19,356	8,914	5-15	(11,216)		11,216	1,651	4,998	5,201	10,289	(8,672)		8,672	200	1,731,400
225 Chelsea	28,000	8,464	3,900	5-15	(4,891)		4,891	400	(5,018)		5,018	(3,556)		3,556	200	711,200
226 Chicopee	12,000	4,245	1,956	5-15	(2,453)		2,453	1,000	920	900	1,820	714	694	996		
227 Clinton	10,000	3,124	1,439	5-15	913	892	1,805	18	(736)		736	(518)		518	196	275,968
228 Concord	4,000			5-15					(1,257)		1,257	(958)		958	190	98,420
229 Danvers	7,300	1,901	876	5-15	(1,099)		1,099	25	(1,417)		1,417	(1,051)		1,051	185	177,280
230 Dedham	6,830	2,091	963	5-15	(1,208)		1,208	25	(811)		811				200	210,200
231 Easthampton *	4,500	1,421	655	5-15	(821)		821								180	
232 Everett	7,500	2,110	970	5-15	610	607	1,217	30	694	662	1,356	603	561	1,164	194	225,816
233 Fall River	63,961	22,080	10,173	5-15	(12,758)		12,758	2,183	(10,759)		10,759	(7,025)		7,025	200	1,405,000
234 Fitchburg	18,000	3,993	1,840	5-15	1,124	1,183	2,307	500	1,702	1,472	3,174	1,177	1,027.4	2,204.4	179	393,495
235 Framingham *	9,325	2,501	1,100	5-15	700	680	1,380		852	805	1,657	603	558	1,161	190	220,590
236 Franklin	5,000	1,596	735	5-15	(922)		922	31	453	440	893					
237 Gloucester	23,000	7,175	3,306	5-15	2,018	2,128	4,146	350	1,996	2,014	4,010	1,694	1,710	3,404	188	639,952
238 Great Barrington	5,000	1,630	751	5-15	(942)		942					409	418	740	192	136,320
239 Greenfield	5,030	1,622	747	5-15	(937)		937		(1,066)		1,066			827	180	144,860
240 Haverhill	25,030	6,978	3,215	5-15	(4,032)		4,032	1,000	(3,650)		3,650	(2,701)		2,701	200	386,180

241	Hingham.....	5,000	1,111	612	317	642	100	363	369	732	307.8	291.8	602.6	187
242	Holyoke.....	32,041	10,898	5,020	3,182	7,256	2,076	2,288	2,052	4,340	1,456	1,273	2,729	197
243	Hopkinton.....	4,000	1,308	603	(766)	6,707		(2,305)		2,805	(1,562)		1,562	
244	Hyde Park.....	9,337	2,909	1,340	(7,758)	7,758	1,500	(5,486)		5,486	(5,486)		4,700	220
245	Lawrence.....	42,990	13,426	6,186	(975)	975	3,300	(10,167)		10,167	(6,721)		878	180
246	Leominster.....	77,000	1,687	9,278		11,635							6,721	194
247	Lowell.....	75,000	20,136	4,403	(11,635)	3,485							5,894	192
248	Lynn.....	50,000	13,651	6,290		7,888	700	3,338	3,497	6,835	2,752	3,142	1,045	174
249	Malden.....	67,964	5,277	1,431		3,049	609	1,384	1,499	8,853	1,019	1,997	1,803	193
250	Martinehead.....	12,500	2,482	1,143		1,539	12	1,384	681	1,818	(1,447.2)		1,447.2	190
251	Mattborough.....	7,500	3,894	1,794		1,434		1,025	681	1,986	(1,502)		1,502	180
252	Melrose.....	7,300	2,859	1,317		2,250	0	901	917	1,389	(57)		641	180
253	Melrose.....	7,300	2,859	1,317		1,815		689	700	768	(611)		742	180
254	Methuen.....	7,000	1,378	636		804		(765)		827	(712)		1,153	175
255	Middleborough.....	7,000	1,378	636		797	75	(827)		879	(611)		742	180
256	Milford.....	10,500	2,978	1,372		920	228	818	711	1,529	632	521	1,153	175
257	Milbury*.....	4,800	1,142	734		920				879				212
258	Monkton.....	4,000	1,142	626		660	0	315	330	645				170
259	Monkton.....	4,000	1,142	626		1,360	0	581	607	1,188	413	503	916	180
260	Naticket.....	4,000	891	411		515	150	155	200	351	128	187	315	233
261	Naticket.....	4,000	891	411		489	0	232	289	688			511	164
262	Needham.....	89,000	7,064	3,255		2,511	2,000	1,941	2,154	4,095	(3,599.7)		3,599.7	185
263	New Bedford.....	15,000	4,351	2,005		2,511	2,800			1,620	(1,175)		1,175	200
264	Newburyport.....	20,000	6,737	3,104		2,893		(1,337)		4,237	(3,357.1)		3,357.1	200
265	Newton.....	13,000	4,851	2,270		2,822	400	1,491	1,267	2,758	(1,778)		1,778	183
266	North Adams.....	4,650	1,327	625		781	0			891	(623)		623	200
267	Northampton.....	13,943	4,155	1,915		2,401	240	1,074	1,359	2,433	824	1,049	1,873	178
268	Northbridge.....	4,000	1,179	543		681	60	463	406	839	243	1,227	1,570	195
269	Peabody.....	9,750	3,840	1,769		2,219	260	1,063	1,119	2,181	(1,506)		1,506	185
270	Pittsfield.....	15,000	5,273	2,430		3,047	30	1,590	1,616	3,236	1,000	1,226	2,226	200
271	Plymouth.....	7,239		620		652	0	322	410	732	(1,100)		1,100	200
272	Randolph.....	4,000	1,128	520		352				896	266	300	566	190
273	Rockland.....	5,000	1,398	644		386	1,308	2,416	1,612	4,028	1,883	1,190	3,073	180
274	Salem.....	28,500	9,037	4,164		5,222		(5,300)		5,300	(4,678)		4,678	190
275	Somerville*.....	81,000	9,903	4,563		5,722	620	457	512	999	305	334	639	181
276	Southbridge.....	6,750	2,622	1,208		1,515	1,400	3,234	2,688	5,922	2,392.2	1,923	4,315.2	195
277	Springfield.....	40,000	11,277	5,196		6,816	25	515	541	1,056	(812)		812	200
278	Stoughton.....	6,000	1,774	709		457	1,025	300	436	865	310	297	607	180
279	Stoughton*.....	5,235		817		498		436	429	4,213	(3,094)		3,094	200
280	Taunton.....	7,401		3,410		708		692	741	1,433	506	618	1,124	189
281	Wakefield.....	2,380		1,096		1,375		(3,008)		3,008	(2,454)		2,454	189
282	Waltham.....	16,000	4,782	2,203		2,763	0	(1,014)		1,014	(715.1)		715.1	190
283	Warren.....	5,000	1,469	677		849	20	(1,322)		1,322	(1,033)		1,033	198
284	Watertown.....	6,500	1,997	920		613	800	265	285	1,550	188	202	390	200
285	West Springfield.....	5,000	2,203	1,015		1,273	26	(1,046)		1,046	(940)		940	c200
286	West Springfield.....	5,000	1,495	689		864	800	(843)		1,005				200
287	West Springfield.....	4,900	1,459	672		843	26	(1,005)		1,005				200
288	Westfield.....	9,200	2,932	1,351		894	30	800	870	1,670	600	692	1,292	196
289	Weymouth.....	11,000	3,155	1,454		823	30	1,075	1,130	2,205	920	945	1,865	190
290	Worcester.....	4,500	1,391	641		804	35	406	374	780	(726)		725	190

* Statistics of 1886-87.

b High school was in session but 150 days.

c Some schools were in session but 175 days.

d High and grammar schools were in session 200 days.

e Some schools were in session but 180 days.

TABLE 20.—Statistics for 1887-88 of Population and School Enrolment and Attendance in Cities and Towns Containing over 4,000 Inhabitants—Continued.

City or Town.	Total Population, Actual or Estimated, in 1887.	Population 4 to 21.	Population 6 to 14.	School Census Age.	Whole Number of Children of School Census Age.			Estimated Enrolment in Private and Parochial Schools.	Whole Number Enrolled in Public Day Schools, Excluding Duplicates.		Average Daily Attendance in Public Day Schools.				Number of Days Pupils were Taught.	Total Attendance in all Grades.
					Male.	Female.	Total.		Male.	Female.	Total.	Male.	Female.	Total.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MASSACHUSETTS—continued.																
291 Woburn.....	12,760	4,373	2,015	6-14		(1,512)	1,512	600	673	669	2,410	(1,786)		1,786	200	357,200
292 Worcester.....	75,000	24,733	11,421	5-15	6,512	7,814	14,326	2,500	4,911	5,894	10,805	4,471	5,366	9,837	139	1,859,193
MICHIGAN.																
293 Adrian.....	9,500	2,384	1,297	5-20		(2,356)	2,356	500	673	669	1,342	483	470	953	195	180,269
294 Ann Arbor.....	10,000	3,300	1,639	5-20	1,390	1,569	2,959	300	1,054	912	1,966	(1,530)		1,530	190	290,700
295 Battle Creek.....	14,000	3,002	1,747	5-20	1,460	1,712	3,172	400	876	904	1,870	615	685	1,310	195	255,450
296 Bay City.....	35,000			5-20				1,000	435	(3,998)	3,998	(2,735)		2,735	194	521,489
297 Calumet.....	5,000	1,313	637	5-20	548	608	1,156	0	435	457	892	247	270	517	196	101,662
298 Charlevoix.....	7,000	1,304	675	5-20	659	575	1,235	390	203	256	459	138	150	288	195	53,169
299 Cheboygan.....	5,500	1,436	697	5-20		(1,265)	1,265	0		(1,063)	1,063	(764)		764	194	148,216
300 Coldwater.....	230,000	76,035	36,877	5-20	4,336	4,432	8,768	890	2,301	2,293	4,594	1,695	(1,728)	16,161	200	3,252,818
301 East Saginaw.....	33,000	9,956	4,829	5-20	4,336	4,432	8,768	890	2,301	2,293	4,594	1,695	(1,728)	16,161	200	3,252,818
302 Escanaba.....	7,000	1,922	738	5-20	650	690	1,340	550	316	341	657	180	204	384	200	76,809
303 Flint.....	12,000	2,035	989	5-20		(1,793)	1,795	300	855	910	1,795	130	(1,317)	1,317	193	269,925
304 Grand Haven*.....	6,000	2,213	1,073	5-20	(1,949)		1,949	2,000	4,543	4,710	9,253	(6,887)		6,887	200	190,905
305 Ionia.....	50,000	15,972	7,746	5-20	(11,066)		11,066	433	903	1,099	2,002	(833)		833	193	1,271,261
306 Jackson.....	5,500	1,517	736	5-20	(2,775)		2,775	200	963	1,099	2,000	(833)		833	194	162,482
307 Kalamazoo.....	19,000	5,221	2,532	5-20	(2,026)		2,026	450	1,420	1,591	3,014	1,058	(1,466)	1,466	189	277,474
308 Ludington.....	7,131	2,300	1,116	5-20	(2,370)		2,370	325	822	912	1,734		1,355	2,193	194	438,551
309 Marquette.....	8,000	2,691	1,305	5-20	616	612	1,228	325	712	731	1,476	281	(948)	948	194	183,912
310 Marshall.....	4,500	1,394	676	5-20			1,228	200	375	366	741	281	278	559	194	108,416
311 Menominee.....	8,500	2,514	1,219	5-20	(2,214)		2,214	350	603	610	1,218	(800)		800	200	80,000
312 Monroe.....	5,400	2,163	1,049	5-20	(1,905)		1,905	550	480	451	931	305	(323)	628	192	120,576
313 Negaunee.....	7,000	2,372	1,150	5-20	1,029	1,050	2,089	500	480	451	931	305	(323)	628	192	120,576
314 Niles.....	5,000	1,466	711	5-20	(1,291)		1,291	100	433	465	904	(670)		670	186	125,122.5

316	Pontiac*	5,000	1,455	696	5-20	1,264	0	527	562	1,089	774.5	200	151,279.5
317	Port Huron.....	11,321	4,300	2,086	5-20	1,821	1,946	1,194	1,138	2,312	1,856	185	322,740
318	Saginaw.....									2,916	(1,856)	190	337,866
319	West Bay City.....	13,000	3,747	1,817	5-20	(3,300)		200	(2,916)	2,916	1,730	194	430,980
320	Wyandotte.....	1,498	1,498	726	5-20	1,319		275	(2,705)	373	430	192	96,922
321	Ypsilanti.....	6,000	1,916	944	5-20	(1,714)		200	435	829	580	200	116,000
MINNESOTA.													
322	Anoka.....	4,500	1,365	669	5-21	(1,264)		60	(885)	885	626	180	112,825
323	Brainerd.....	8,000			5-21			0	489	936	302	180	104,708
324	Crookston.....	5,000	2,651	1,298	5-21	1,132	1,822	502	518	1,020	525	180	93,507
325	Duluth.....	25,000			5-21			1,139	1,327	2,466	1,450	189	274,050
326	Faribault*	7,000			5-21			500		325	420	177	129,937
327	Marquette.....	9,000			5-21					(843)	843	176	148,368
328	Minneapolis.....	200,000	62,930	25,921	5-21	24,009	25,000	8,322	9,065	17,957	12,521	194	2,395,000
329	Red Wing.....	7,000			5-21			200		(12,521)	923.3	180	163,212.5
330	St. Cloud.....	6,000	1,944	952	5-21	(1,800)		450	(870)	870	570	180	104,450
331	St. Paul.....	165,577			5-21			400	(12,614)	12,614	8,729	196	1,715,127.5
332	Still Water.....	16,000			5-21			1,000	(1,562)	1,562	1,219	180	219,000
333	Winona*	20,000			5-21				(2,413)	2,413	1,701	196	295,504
MISSISSIPPI.													
334	Jackson.....	8,500	2,383	1,241	5-21	1,000	1,200	800	900	1,700	1,100	160	176,000
335	Meridian.....	12,000	3,781	1,971	5-21	1,830	1,670	592	840	1,432	403	190	176,320
336	Natchez.....	10,000	4,061	2,121	5-21	1,862	1,898	545	650	1,195	928	180	130,940
337	Vicksburg.....	22,000	4,506	2,353	5-21	2,067	2,104	672	908	1,580	706	160	177,600
MISSOURI.													
338	Butler.....	4,500	1,319	675	6-20	518	514	418	416	831	511	180	89,358
339	Carrollton.....	4,500	1,750	875	6-20	678	738	568	572	1,120	885	180	132,020
340	Cardiff.....	8,000	2,711	1,356	6-20	1,021	1,170	736	857	1,593	1,132.3	176	202,894.8
341	Chillicothe*	5,500	1,880	1,017	6-20	838	807	462	468	550	687	139	104,001
342	Clinton.....	8,000	2,830	910	6-20	736	785	570	601	1,171	379	180	146,800
343	Columbia.....	5,000	2,020	1,010	6-20	775	858	360	421	781	279	134	83,277
344	De Soto.....	4,000	1,332	666	6-20	512	565	276	301	577	526	133	74,888
345	Hannibal.....	13,000	5,196	2,598	6-20	2,098	2,106	1,169	1,249	2,418	1,629	177	283,353
346	Independence.....	6,500	1,972	986	6-20	758	838	579	624	1,203	732.8	136	99,662
347	Jefferson City*	7,271	2,584	1,292	6-20	998	1,092	493	501	997	380.1	176	130,729
348	Kansas City.....	160,000	48,570	24,285	6-20	19,014	20,215	8,300	8,500	16,550	9,550	180	1,719,000
349	Lexington.....	5,000	2,352	1,176	6-20	961	941	397	343	740	510	178	90,780
350	Louisiana.....	5,000	1,796	873	6-20	(1,420)		150	(972)	972	657	157	103,614
351	Maryville.....	4,500	1,644	822	6-20	635	694	482	594	1,076	428	177	131,511
352	Mexico.....	5,000	1,824	912	6-20	725	750	570	610	1,180	392	180	137,230.5
353	Moberly.....	11,000	4,692	2,346	6-20	1,838	1,958	822	829	1,651	603	157	180,600
354	Nevada.....	8,000	2,082	1,012	6-20	890	795	736	645	1,381	908	158	143,514
355	Pierce City.....	4,000	1,206	603	6-20	500	475	350	160	510	.....	175	.....

* Statistics of 1886-87.

NEW HAMPSHIRE.									
375	Claremont.....	5,500	1,732	791	5-15	494	406	990	12
376	Concord.....	14,000	3,560	1,622	5-15	1,016	1,013	2,029	600
377	Deerfield.....	19,000	4,142	1,892	5-15	1,249	1,118	2,367	3,700
378	Keene*.....	19,000	4,142	1,892	5-15	1,249	1,118	2,367	3,700
379	Nashua.....	10,000	2,814	1,285	5-15	872	736	1,608	1,750
380	Portsmouth.....	10,000	2,540	1,164	5-15	726	731	1,457	1,250
381	Rochester.....	5,000	1,837	839	5-15	500	550	1,050	25
382	Somersworth.....								
383									
NEW JERSEY.									
384	Atlantic City*.....	8,500	2,533	1,223	5-18	1,022	913	1,935	100
385	Bayonne.....	13,080	5,216	2,519	5-18	1,753	2,192	3,988	.....
386	Calden.....	65,000	20,944	10,113	5-18	700	1,000	16,000	.....
387	Elizabeth.....	31,500	11,063	5,602	5-18	8,861	8,861	8,861	2,247
388	Gloucester*.....								
389	Harrison.....	8,000	2,992	1,447	5-18	1,186	1,100	2,286	700
390	Jersey City.....	187,000	75,210	36,313	5-18	57,456	561	57,456	4,040
391	Lambertville.....	4,350	1,397	674	5-18	506	561	1,067	230
392	Long Branch*.....	6,000	3,928	1,897	5-18	1,492	1,509	3,001	50
393	Millville.....	10,000	3,506	1,693	5-18	1,439	1,239	2,678	125
394	Montclair.....	7,000	1,728	334	5-18	651	659	1,320	235
395	Morristown.....		2,475	1,195	5-18	940	951	1,891	575
396	Mount Holly.....	5,000	1,571	758	5-18	1,200	1,255	1,200	125
397	New Brunswick.....	18,600	7,201	3,477	5-18	2,799	2,702	5,501	1,306
398	Newark.....	160,000	65,560	32,136	5-18	50,847	10,000	50,847	10,000
399	Orange.....	17,000	6,495	3,136	5-18	4,962	4,962	4,962	1,400
400	Passaic.....	12,000	3,839	1,854	5-18	1,631	1,302	2,933	600
401	Paterson.....	70,000	23,674	11,430	5-18	18,985	1,298	18,985	2,000
402	Phillipsburg.....	8,500	3,481	1,681	5-18	1,351	1,298	2,659	140
403	Plainfield.....	10,300	3,865	1,625	5-18	1,292	1,299	2,571	450
404	Railway.....	8,000	2,308	1,114	5-18	876	937	1,763	245
405	Salem.....	5,500	1,842	889	5-18	1,407	1,500	1,407	150
406	Trenton.....	37,500	11,824	5,709	5-18	9,033	1,632	9,033	1,450
407	Weehawken.....	10,500	3,330	1,638	5-18	1,276	1,268	2,544	.....
NEW YORK.									
408	Albany.....	95,000	1,321	630	5-21	636,000	703	636,000	5,000
409	Albion.....	5,000	1,828	3,705	5-21	542	703	1,245	1,335
410	Auburn.....	25,000	7,828	3,705	5-21	3,586	8,798	7,324	1,800
411	Babylon.....	3,300	2,225	1,053	5-21	945	1,137	2,082	526
412	Binghamton.....	27,000	7,416	3,510	5-21	2,775	4,104	6,339	529
413	Brooklyn.....	774,807	83,622	30,579	5-21	38,163	40,079	78,242	12,015
414	Buffalo.....	230,000	1,763	835	5-21	1,650	300	1,650	300
415	Canandaigua.....	7,000	1,763	835	5-21	1,650	300	1,650	300
416	Catskill.....	5,000							

a Primary and ungraded schools, 175 days; high-school, 190 days.

b Average number.

c Estimated.

* Statistics of 1886-87.

TABLE 20.—Statistics for 1887-88 of Population and Attendance in Cities and Towns Containing over 4,000 Inhabitants—Continued.

City or Town.	Total Population, Actual or Estimated, in 1887.	Population 4 to 21.		Population 6 to 14.		School Census Age.	Whole Number of Children of School Census Age.			Estimated Enrollment in Private and Parochial Schools.	Whole Number Enrolled in Public Day Schools, Excluding Duplicates.			Average Daily Attendance in Public Day Schools.			Number of Days Pupils were Taught.	Total Attendance in all Grades.
		Male.	Female.	Male.	Female.		Total.	Male.	Female.		Total.	Male.	Female.	Total.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
NEW YORK—cont'd.																		
417 Cohoes.....	22,500	8,405	3,979	5-21	3,880	4,035	7,865	1,250	1,513	1,580	3,103	(2,106)		2,105	202	425,412		
418 Corning*.....	6,007	1,886	883	5-21	869	896	1,765	.....	658	767	1,425	(824)		824	198	171,214	
419 Cortland.....	2,284	1,105	1,105	5-21	600	600	1,200	40	290	390	881	(503.9)		503.9	192	97,904		
420 Dansville.....	4,000	1,347	637	5-21	600	660	1,260	250	290	390	680	150	190	340	185	63,300		
421 Dunkirk.....	10,500	3,249	1,538	5-21	587	629	1,216	488	350	466	1,270	(947.6)		947.6	194	183,839		
422 Ellenville.....	4,000	1,300	615	5-21	587	629	1,216	6	230	266	486	246	279	325	196	101,667		
423 Elmira.....	25,515	7,389	3,497	5-21	3,401	3,513	6,914	670	2,316	2,261	4,577	1,669	1,586	2,255	187	638,361		
424 Flushing*.....	8,000	3,716	1,759	5-21	3,401	3,513	6,914	450	539	721	1,003	(634)		634	157	136,526		
425 Geneva.....	10,000	1,924	911	5-21	725	1,075	1,800	325	539	721	1,003	395	681	1,076	198	213,048		
426 Gloversville.....	5,000	2,056	1,257	5-21	1,455	1,075	2,530	.....	499	469	968	(1,180)		1,180	195	230,012	
427 Green Island.....	1,393	1,962	659	5-21	680	623	1,303	35	499	469	968	263	279	572	199	114,315		
428 Herkimer.....	4,000	1,962	809	5-21	780	820	1,600	.....	550	718	1,268	445	552	400	194	77,600	
429 Hoosick Falls.....	7,000	1,710	855	5-21	1,540	1,527	3,067	.....	984	1,062	2,046	680	795	1,475	194	184,423	
430 Hornellsville.....	8,700	3,273	1,562	5-21	(3,700)	1,527	5,227	650	701	615	1,316	475	387	872	197	169,880		
431 Hudson.....	11,000	.....	.....	5-21	1,125	0	1,125	.....	379	568	947	294	460	754	195	147,030
432 Ilion.....	1,203	1,203	569	5-21	(2,736)	.....	2,736	400	(1,791)	568	947	294	460	754	191	244,186	
433 Ithaca.....	4,300	2,624	1,384	5-21	(2,736)	.....	2,736	.....	.....	.....	.....	(1,278)		1,278	191	244,186
434 Jamaica.....	11,000	1,650	1,781	5-21	(1,544)	.....	1,544	.....	.....	.....	.....	.....	.....	.....	.....	.....
435 Jamestown.....	15,000	4,012	1,899	5-21	(3,732)	.....	3,732	175	1,250	1,294	2,544	839	846	1,685	195	318,290	
436 Johnston.....	7,500	2,258	1,073	5-21	1,036	1,086	2,122	.....	626	656	1,282	445	455	900	195	175,606	
437 Kingston.....	12,000	3,210	1,519	5-21	1,507	1,496	3,003	390	832	879	1,711	549	571	1,120	194	220,870		
438 Lansingburg.....	10,000	3,405	1,612	5-21	1,507	1,496	3,003	.....	766	785	1,551	(1,081)		1,081	189	204,832	
439 Little Falls.....	18,000	2,573	1,218	5-21	(2,407)	.....	2,407	200	(1,237)	785	1,551	(1,081)		1,081	195	214,890	
440 Lockport.....	30,000	9,619	4,553	5-21	(4,000)	.....	4,000	500	(2,606)	785	1,551	(1,081)		1,081	196	374,198	
441 Long Island City.....	30,000	1,273	605	5-21	(1,196)	.....	1,196	60	(4,938)	785	1,551	(1,081)		1,081	193	622,591	
442 Lyons.....	5,000	1,902	900	5-21	(1,196)	.....	1,196	.....	(4,938)	785	1,551	(1,081)		1,081	189	136,963
443 Malone.....	5,000	1,902	900	5-21	(1,196)	.....	1,196	.....	(4,938)	785	1,551	(1,081)		1,081	194	176,272

444	Medina.....	4,554	1,392	659	5-21	627	675	1,302	15	465	575	1,070	278.1	345.1	623.2	200	122,773
445	Middletown*	11,000	3,083	1,450	5-21	(2,885)	2,885	2,885	77	2,029	575	2,029	1,351	1,351	1,351	199	274,964
446	Mount Vernon.....	9,000	3,107	1,471	5-21	(2,907)	2,907	2,907	140	1,935	567	1,935	1,331	1,331	1,331	191	251,170
447	New Rochelle.....	8,000	2,458	1,163	5-21	1,200	1,100	2,300	250	440	567	1,007	301	301	301	204	127,875
448	New York.....	1,500,000	452,089	213,980	5-21	212,750	210,250	423,040	75,000	127,821	113,109	240,430	80,310	76,091	156,401	198	30,021,835
449	Newburg.....	25,000	7,093	3,358	5-21	(6,639)	6,639	6,639	1,212	700	881	1,723	(2,337.7)	(2,337.7)	2,337.7	197	460,535
450	Ogdensburg*	12,000	3,983	1,885	5-21	(3,727)	3,727	3,727	1,700	802	881	1,687	(1,239)	(1,239)	1,239	195	234,917
451	Oran.....	9,000	2,545	1,201	5-21	(3,381)	2,381	2,381	2,000	1,057		3,680	(1,040.1)	(1,040.1)	1,040.1	192	199,705
452	Oswego.....	23,000	7,181	3,732	5-21	(7,377)	7,377	7,377	1,200	900	469	3,037	(738)	(738)	738	197	494,882
453	Pawnee.....	4,200	2,661	1,231	5-21	1,169	1,321	2,400	200	345	395	740	199	341	440	195	85,800
454	Peabody.....	5,000	2,567	1,242	5-21	1,710	1,756	2,465	100	721	623	1,344	495	492	987	187	184,150
455	Port Chester.....	10,500	3,065	1,451	5-21	1,456	1,413	2,869	225	912	962	1,874	623	(413)	1,306	191	78,571
456	Port Jervis.....	20,500	6,413	3,035	5-21	(6,000)	6,000	6,000	800	1,392	1,543	2,940	623	(2,038.5)	11,789	194	407,332
457	Poughkeepsie.....	120,000	3,055	1,437	5-21	(40,000)	1,545	40,000	300	856	1,066	1,912	(1,789)	(1,789)	1,789	196	2,310,041
458	Rome*	14,000	3,055	1,437	5-21	(2,603)	2,603	2,603	75	(2,185)	1,066	2,185	(1,400.4)	(1,400.4)	1,400.4	190	228,051
459	Saratoga Springs.....	12,000	2,886	1,366	5-21	(1,785)	1,785	1,785	365	6,297	6,332	1,633	(823.6)	(823.6)	823.6	190	273,085
460	Seneca Falls.....	6,750	2,194	1,039	5-21	(25,902)	25,902	25,902	2,865	6,297	6,332	1,633	(732.5)	(732.5)	732.5	191	163,908
461	Sing Sing.....	6,000	2,194	1,039	5-21	(734)	734	734	300	4,480	3,936	8,476	4,850	4,851	9,701	195	143,740
462	Syracuse.....	81,339	27,683	13,103	5-21	(1,872)	1,872	1,872	300	4,480	3,936	8,476	4,850	4,851	9,701	195	1,801,095
463	Tarrytown.....	4,000	784	371	5-21	(957)	957	957	300	4,480	3,936	8,476	4,850	4,851	9,701	195	1,801,095
464	Tonawanda.....	6,000	2,001	947	5-21	7,089	7,100	14,189	2,500	3,309	3,161	6,470	2,391	2,312	5,785	196	104,235
465	Troy.....	63,000	15,164	7,177	5-21	(1,455)	1,455	1,455	1,341	3,309	3,161	6,470	2,391	2,312	5,785	196	1,128,407
466	Utica.....	40,000	1,555	735	5-21	(1,179)	1,179	1,179	80	461	420	881	269	250	4,703	195	917,085
467	Watford.....	6,000	1,260	596	5-21	(815)	815	815	75	1,063	1,074	2,137	(525.3)	(525.3)	525.3	199	103,371
468	Watertown.....	5,500	1,260	596	5-21	(3,874)	3,874	3,874	200	1,063	1,074	2,137	(525.3)	(525.3)	525.3	197	102,887
469	Watertown.....	7,000	1,683	797	5-21	856	719	1,575	200	425	400	825	255	262	1,444.6	195	293,925
470	W. New Brighton*	4,000	1,683	797	5-21	(9,112)	9,112	9,112	85	574		574	(332)	(332)	332	188	68,081
471	White Plains.....	30,193	9,738	4,609	5-21	(9,112)	9,112	9,112	1,941	1,577	1,451	3,031	1,076	968	2,041	193	391,497
472	Yonkers.....	8,500	2,355	1,201	5-21	(1,938)	1,938	1,938	200	1,126	1,272	2,898	734	797	1,375	156	58,800
473	Yonkers.....	8,500	2,355	1,201	5-21	(1,938)	1,938	1,938	200	1,126	1,272	2,898	734	797	1,375	156	58,800
474	Yonkers.....	8,500	2,355	1,201	5-21	(1,938)	1,938	1,938	200	1,126	1,272	2,898	734	797	1,375	156	58,800
475	Durham.....	7,000	1,768	901	6-21	840	750	1,600	200	336	380	706	126	159	255	180	51,300
476	Fayetteville.....	7,000	1,768	901	6-21	840	750	1,600	200	336	380	706	126	159	255	180	51,300
477	New Bern*	15,000	5,362	2,732	6-21	(4,548)	4,548	4,548	200	336	380	706	126	159	255	180	51,300
478	Raleigh.....	4,000	1,506	757	6-21	(1,277)	1,277	1,277	200	1,126	1,272	2,898	734	797	1,375	156	58,800
479	Reidsville.....	8,000	2,355	1,201	6-21	(1,938)	1,938	1,938	200	1,126	1,272	2,898	734	797	1,375	156	58,800
480	Winston.....	8,000	2,355	1,201	6-21	(1,938)	1,938	1,938	200	1,126	1,272	2,898	734	797	1,375	156	58,800
481	Akron.....	27,300	8,497	4,158	6-21	3,665	3,715	7,380	957	2,308	2,345	4,654	1,821	1,823	3,644	193	703,234
482	Alliance.....	6,130	2,068	1,027	6-21	915	907	1,822	125	623	702	1,827	603	680	886	192	189,312
483	Astabula.....	11,000	3,901	1,909	6-21	1,841	1,577	3,388	425	943	968	1,911	344	291	635	175	117,063
484	Bellare.....	4,675	1,298	635	6-21	575	552	1,127	150	410	405	815	670	676	1,316	174	228,384
485	Bellefontaine.....	6,000	1,834	898	6-21	790	803	1,593	110	535	540	1,076	375	377	638	180	96,810
486	Bucyrus.....	21,000	6,957	3,404	6-21	(6,042)	6,042	6,042	850	1,738	1,830	3,628	1,290	1,397	752	192	142,880
487	Canton*	21,000	6,957	3,404	6-21	(6,042)	6,042	6,042	850	1,738	1,830	3,628	1,290	1,397	752	192	515,304

a Estimated.

* Statistics of 1880-87.

TABLE 20.—Statistics for 1887-88 of Population and School Enrolment and Attendance in Cities and Towns Containing over 4,000 Inhabitants—Continued.

City or Town.	Total Population, Actual or Estimated, in 1887.	Population 4 to 21.	Population 6 to 14.	School Census Age.	Whole Number of Children of School Census Age.			Estimated Enrolment in Private and Parochial Schools.			Whole Number Enrolled in Public Day Schools, Excluding Duplicates.			Average Daily Attendance in Public Day Schools.			Number of Days Pupils Were Taught.	Total Attendance in Grades of all Pupils of all
					Male.	Female.	Total.				Male.	Female.	Total.	Male.	Female.	Total.		
OHIO—continued.																		
488 Chillicothe.....	11,000	4,468	2,187	6-21	1,973	1,908	3,881	300	1,031	922	809	722	1,531	809	722	1,531	186	284,766
489 Cincinnati.....	93,524	45,767	21,526	6-21	41,521	39,705	81,226	16,840	17,726	16,835	14,539	13,591	28,130	14,539	13,591	28,130	190	5,344,700
490 Circleville*.....	8,000	2,571	1,258	6-21	1,136	1,097	2,233	150	658	637	443.6	439.5	883.1	443.6	439.5	883.1	200	176,620
491 Cleveland.....	250,000	74,321	36,371	6-21	32,741	31,099	64,550	14,013	15,969	16,123	12,501.7	12,364	24,865.7	12,501.7	12,364	24,865.7	196	4,873,677
492 Columbus.....	76,601	27,001	13,213	6-21	11,965	11,486	23,451	2,762	5,530	5,749	4,357	4,483	8,840	4,357	4,483	8,840	194	1,733,010
493 Dayton.....	16,562	8,105	4,225	6-21	7,290	7,095	14,385	.....	3,864	3,776	3,017.3	2,964.9	5,982.2	3,017.3	2,964.9	5,982.2	200	159,603
494 Defiance*.....	6,668	2,504	1,225	6-21	1,142	1,033	2,175	500	634	583	453	433	886	453	433	886	200	123,480
495 Delphos.....	5,000	1,828	895	6-21	1,764	1,624	3,388	150	452	416	375	311	686	375	311	686	180	166,320
496 East Liverpool*.....	8,000	3,042	1,455	6-21	1,242	1,340	2,582	160	707	670	460	464	924	460	464	924	180	146,276
497 Elyria.....	5,000	1,843	1,391	6-21	1,234	1,235	2,469	297	465	474	374	380	754	374	380	754	194	146,276
498 Findlay.....	13,000	1,757	1,860	6-21	1,772	1,754	3,526	200	862	856	576	566	1,142	576	566	1,142	180	205,560
499 Fostoria.....	6,000	2,250	1,015	6-21	939	1,015	1,954	600	583	552	379	397	776	379	397	776	172.5	133,558
500 Fremont.....	9,000	2,075	1,015	6-21	933	839	1,772	200	690	680	454	438	892	454	438	892	175	143,675
501 Grafton.....	7,000	2,181	1,067	6-21	910	984	1,894	100	590	679	424	449	873	424	449	873	200	194,200
502 Gallipolis.....	5,571	2,146	1,067	6-21	1,831	1,780	3,611	1,050	1,139	1,194	912	965	1,877	912	965	1,877	193	169,362
503 Hamilton*.....	12,000	4,146	2,029	6-21	1,821	1,780	3,601	400	1,077	1,078	831	831	1,662	831	831	1,662	186	312,480
504 Ironton.....	17,000	2,233	1,063	6-21	974	965	1,939	250	620	568	445.3	423	868.3	445.3	423	868.3	183	158,898.9
505 Lancaster.....	10,000	3,851	1,885	6-21	1,724	1,638	3,362	300	1,011	1,003	704.8	718.3	1,423.1	704.8	718.3	1,423.1	176	240,448
506 Lima.....	13,000	3,871	1,884	6-21	932	838	1,770	200	1,142	1,131	911	929	1,840	911	929	1,840	176	323,840
507 Mansfield.....	6,000	2,176	1,063	6-21	932	845	1,777	200	598	659	419	436	855	419	436	855	184	174,748
508 Marietta.....	6,950	1,960	999	6-21	887	1,063	1,950	.....	638	702	394	436	830	394	436	830	180	149,400
509 Martin's Ferry.....	10,000	3,630	1,777	6-21	1,390	1,363	2,753	.....	490	822	642	693	1,335	642	693	1,335	194	241,530
510 Massillon*.....	6,000	2,610	1,231	6-21	1,165	1,079	2,244	.....	490	479	342	328	670	342	328	670	193	128,624
511 Middletown.....	8,500	2,610	1,231	6-21	1,165	1,079	2,244	.....	490	479	342	328	670	342	328	670	193	128,624
512 Mount Vernon.....	6,000	2,610	1,231	6-21	1,165	1,079	2,244	.....	490	479	342	328	670	342	328	670	193	128,624
513 Nelsonville.....	15,000	1,686	825	6-21	777	687	1,464	269	581	576	359	394	753	359	394	753	180	173,540
514 Newark.....	15,000	1,686	825	6-21	777	687	1,464	269	1,058	1,235	784.8	922.4	1,707.2	784.8	922.4	1,707.2	183	315,832

515	Norwalk	9,000	2,458	1,203	6-21	1,113	1,022	2,135	350	629	656	1,285	450	482	592	115	181,740
516	Painesville	8,500	1,447	1,708	6-21	572	685	1,257	349	386	386	1,735	234	265	499	189	94,311
517	Piquette	14,000	3,038	1,487	6-21	1,311	1,328	2,639	400	681	681	1,176	463	423	886	180	159,480
518	Portsmouth	14,000	4,962	2,438	6-21	2,056	2,214	4,310	400	1,081	1,080	2,111	702	777	1,479	190	281,010
519	Ravenna	4,000	1,279	626	6-21	529	682	1,111	100	375	371	746	263	279	542	190	102,980
520	Salmon*	6,000	1,279	626	6-21	529	682	1,111	100	375	371	746	263	279	542	190	102,980
521	Sandusky	23,000	6,888	3,371	6-21	2,894	3,088	5,982	1,000	(2,808)	2,808	(2,281)	(2,281)	(2,281)	2,281	171	117,520
522	Sidney	5,060	1,696	830	6-21	735	738	1,473	175	459	474	933	1,961	1,951.3	3,912.3	194	336,973
523	Springfield	36,000	10,517	5,147	6-21	4,797	4,437	9,134	600	2,488	2,509	4,302	833	904	1,737	195	198,400
524	Steuensville	14,000	5,151	2,521	6-21	2,241	2,233	4,474	700	1,162	683	1,369	475	545	1,020	195	198,400
525	Tiffin	30,000	3,299	1,614	6-21	1,414	1,451	2,865	700	626	683	1,369	475	545	1,020	195	198,400
526	Toledo	90,000	27,189	13,305	6-21	11,269	12,345	23,614	200	4,873	4,875	9,748	3,685	7,795	182	144,898	
527	Urbana	6,500	2,190	1,074	6-21	979	928	1,907	200	548	543	1,091	394	401	795	173	142,898
528	Van Wert	5,500	1,833	793	6-21	793	799	1,592	200	612	643	1,255	411	415	825	178	174,276
529	Washington C. H.	5,200	1,612	789	6-21	686	714	1,400	1,400	612	672	1,284	471	538	1,009	200	200,800
530	Wooster*	6,000	2,242	1,097	6-21	1,947	1,947	3,894	250	689	701	1,400	502	528	1,030	193	198,790
531	Xenia	10,000	2,708	1,325	6-21	1,213	1,139	2,352	1,000	1,864	1,782	3,646	1,375	1,326	2,701	190	513,190
532	Youngstown	24,000	7,063	3,427	6-21	(6,032)	6,082	11,500	250	1,522	1,458	2,980	1,231	1,171	2,402	190	456,380
533	Zanesville*	24,000	7,063	3,427	6-21	(6,032)	6,082	11,500	250	1,522	1,458	2,980	1,231	1,171	2,402	190	456,380
OREGON.																	
534	Astoria	7,000	2,708	1,325	4-20	1,213	1,139	2,352	1,000	1,894	1,782	3,646	1,375	1,326	2,701	190	513,190
535	Portland	35,000	7,660	3,735	4-20	3,668	3,622	7,190	730	2,027	2,262	4,289	1,503.2	216	3,063.5	200	89,800
536	Salmon	6,300	2,128	1,039	4-20	950	1,050	2,000	175	480	457	937	311	299	610	200	608,104
PENNSYLVANIA.																	
537	Allegheny	100,000	25,000	12,500	6-21	11,500	11,500	23,000	3,250	7,366	7,449	14,815	5,100	5,165	10,265	200	2,053,000
538	Allentown	25,000	7,500	3,750	6-21	3,750	3,750	7,500	150	2,137	2,010	4,147	1,632	1,632	3,264	196	560,168
539	Altoona	28,000	8,400	4,200	6-21	4,200	4,200	8,400	1,000	2,137	2,010	4,147	1,632	1,632	3,264	196	560,168
540	Ashland	7,500	2,250	1,125	6-21	1,125	1,125	2,250	150	337	337	674	263	263	526	180	592,380
541	Beaver Falls	9,000	2,700	1,350	6-21	1,350	1,350	2,700	22	816	816	1,631	550	631	1,269	160	192,000
542	Bellefonte	4,500	1,350	675	6-21	675	675	1,350	95	335	335	670	253	311	564	160	90,240
543	Bethlehem	8,000	2,400	1,200	6-21	1,200	1,200	2,400	250	490	465	955	360	360	720	188	137,808
544	Bradford	7,000	2,100	1,050	6-21	1,050	1,050	2,100	350	398	398	796	358	358	716	167	167,480
545	Bradford	10,000	3,000	1,500	6-21	1,500	1,500	3,000	250	500	925	1,905	710	671	1,381	180	248,580
546	Bristol	5,271	1,581	790	6-21	790	790	1,581	200	460	476	953	350	350	700	200	245,580
547	Buller	5,800	1,740	870	6-21	870	870	1,740	100	610	610	1,220	466	478	934	160	153,567
548	Carbondale	12,000	3,600	1,800	6-21	1,800	1,800	3,600	200	918	987	1,905	683	683	1,366	200	200,000
549	Carlisle	8,000	2,400	1,200	6-21	1,200	1,200	2,400	200	918	987	1,905	683	683	1,366	200	200,000
550	Chambersburg	9,000	2,700	1,350	6-21	1,350	1,350	2,700	100	746	762	1,508	570	585	1,153	180	197,900
551	Chester	20,000	6,000	3,000	6-21	3,000	3,000	6,000	100	746	762	1,508	570	585	1,153	180	197,900
552	Columbia	9,853	2,956	1,478	6-21	1,478	1,478	2,956	1,000	1,606	1,576	3,182	673	711	2,001	155	390,135
553	Conshohocken*	6,500	1,950	975	6-21	975	975	1,950	500	806	842	1,618	263	277	540	170	235,960
554	Corry	8,000	2,400	1,200	6-21	1,200	1,200	2,400	425	860	865	1,725	673	711	2,001	200	108,000
555	Danville	8,000	2,400	1,200	6-21	1,200	1,200	2,400	425	860	865	1,725	673	711	2,001	200	108,000
556	Du Bois	7,000	2,100	1,050	6-21	1,050	1,050	2,100	200	460	476	953	350	350	700	180	245,580
557	Dunmore	7,500	2,250	1,125	6-21	1,125	1,125	2,250	30	510	510	1,020	364	373	737	135	99,445
558	Easton*	15,000	4,500	2,250	6-21	2,250	2,250	4,500	1,235	2,235	2,235	4,470	1,180	892	2,000	160	160,400
559	Erie	31,000	9,300	4,650	6-21	4,650	4,650	9,300	2,690	5,380	5,380	10,760	2,690	2,690	5,380	193	376,340
560	Erie	31,000	9,300	4,650	6-21	4,650	4,650	9,300	2,690	5,380	5,380	10,760	2,690	2,690	5,380	193	376,340

* Statistics of 1886-87.

a Estimated.

TABLE 20.—Statistics for 1887-88 of Population and School Enrolment and Attendance in Cities and Towns Containing over 4,000 Inhabitants—Continued.

City or Town.	Total Population, Actual or Estimated, in 1887.	Population 4 to 21.	Population 6 to 14.	School Census Age.	Whole Number of Children of School Census Age.			Estimated Enrollment in Private and Parochial Schools.	Whole Number Enrolled in Public Day Schools, Excluding Duplicates.				Average Daily Attendance in Public Day Schools.			Number of Days Pupils Were Taught.	Total Attendance in Days of Pupils of all Grades.
					Male.	Female.	Total.		Male.	Female.	Total.	Male.	Female.	Total.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
PENNSYLVANIA—continued.																	
Greenville.....	4,500			6-21				500	3,208	3,844	7,052	2,026	(763)	763	160	122,080	
Harrisburg.....	40,000			6-21	1,450	1,350	2,800	400	905	899	1,804			4,324	200	864,800	
Hazleton.....	10,000	3,231	1,591	6-21	1,425	350	775	100	362	336	698	330	(1,257)	1,565	180	228,260	
Honesdale.....	4,500	894	440	6-21					897	979	1,876		(1,436)	1,436	180	256,680	
Johnstown.....	28,000			6-21	4,000	41,000	48,000	500	2,300	2,400	4,700	897	(3,100)	3,100	200	620,000	
Lebanon.....	18,000	2,860	1,408	6-21	1,170	1,308	2,478	350	970	1,108	2,078	204		1,847	180	332,460	
Lehigh Valley.....	4,000							60	310	298	608	204	219	423	140	17,899	
Lock Haven.....	8,000			6-21				200	662	714	1,376	401	485	946	160	151,300	
McKeesport.....	20,000			6-21				800	1,278	1,216	2,494	911	843	1,759	180	316,620	
Mahanoy.....	9,000			6-21				100	758	808	1,566	602	623	1,225	180	220,500	
Meadville.....	11,000			6-21				500	898	967	1,865	694	764	1,458	180	262,440	
Milton.....	4,500	721	355	6-21	300	325	625		270	288	558	135	201	386	180	69,480	
Monongahela.....	4,500							23	444	444	888	321	(933)	933	160	99,840	
Nanticoke.....	13,000	2,308	1,136	6-21	900	1,100	2,000	25	595	672	1,267	338		933	178	106,074	
New Brighton.....	3,000			6-21	41,000	41,000	82,000	100	470	575	1,045	338	412	750	180	135,000	
New Castle.....	13,000			6-21	500	500	1,000	450	1,015	1,019	2,034	774	771	1,545	180	278,100	
Norristown.....	13,000			6-21	500	500	1,000	500	1,303	1,199	2,504	917		1,734	200	358,800	
Oil City.....	11,000			6-21	500	500	1,000	500	951	958	1,909	693	708	1,401	180	232,133	
Olyphant.....	1,000			6-21	4450	4450	8900	0	(400)	(400)	159,367		(322)	322	180	57,900	
Philadelphia.....	1,000,187			6-21				25,000	(159,367)	159,367	400	408	(92,981)	92,981	206	19,154,086	
Phoenixville.....	200,000	2,068	1,013	6-21	879	904	1,783	13	679	704	1,383	498	549	1,047	180	188,460	
Pittsburg.....	15,000			6-21				12,000	14,820	15,046	29,866	10,986	10,766	21,752	200	4,350,400	
Pittsburg.....	11,000			6-21				300	664	540	1,204	412	494	906	180	163,080	
Plymouth.....	6,000			6-21				300	628	727	1,355	403	478	886	160	141,760	
Pottstown.....	6,000			6-21				300	566	554	1,120	(974)		574	200	135,400	

586	Reading.....	60,000	6-21	.....	.....	1,500	4,597	4,443	3,558	3,512	7,070	290	1,414,000
587	Scranton.....	70,000	6-21	.....	.....	.....	5,225	5,702	9,040	11,017	7,425	280	1,485,000
588	Scranton.....	4,000	6-21	.....	.....	.....	207	247	1,017	196	385	180	64,440
589	Shenandoah.....	16,000	6-21	.....	.....	.....	1,438	1,358	2,856	912	1,840	180	431,000
590	South Bethlehem.....	7,100	6-21	.....	.....	.....	100	438	1,210	466	880	200	177,800
591	South Easton.....	7,000	6-21	.....	.....	.....	350	495	1,006	462	856	200	171,200
592	Susquehanna.....	4,500	6-21	.....	.....	.....	281	312	1,592	195	365	180	43,700
593	Tannaqua.....	6,000	6-21	.....	.....	.....	0	686	621	1,307	826	200	163,200
594	Titusville.....	11,000	6-21	.....	.....	.....	789	836	1,625	(1,210 2)	1,210 2	200	223,538
595	Tyrene.....	4,800	6-21	.....	.....	.....	200	355	700	310	635	190	111,300
596	Warren.....	5,000	6-21	.....	.....	.....	200	432	421	853	555	180	99,500
597	Washington.....	5,000	6-21	.....	.....	.....	200	403	512	980	801	170	136,680
598	West Chester.....	8,000	6-21	.....	.....	.....	800	684	1,197	373	783	193	145,329
599	Wilkes Barre.....	37,000	6-21	.....	.....	.....	2,000	3,036	5,815	(4,262)	4,262	185	784,120
600	Williamsport.....	30,000	6-21	.....	.....	.....	2,028	2,082	4,110	1,437	2,935	180	528,535
601	York.....	20,000	6-21	.....	.....	.....	500	1,319	2,990	1,070	2,078	130	374,040
RHODE ISLAND.													
602	Bristol.....	6,000	5-16	.....	.....	.....	543	550	1,053	(842)	842	200	108,400
603	Burrillville.....	5,200	5-16	.....	.....	.....	40	583	1,055	(615)	615	190	236,930
604	Central Falls.....	10,000	5-15	.....	.....	.....	100	(2,325)	2,325	(1,247)	1,247	200	107,400
605	Cranston.....	7,000	5-15	.....	.....	.....	30	529	1,066	(682)	682	200	136,400
606	Cumberland.....	8,000	5-15	.....	.....	.....	263	576	1,015	(1,071)	1,071	200	214,200
607	East Providence.....	8,000	5-15	.....	.....	.....	95	692	1,343	(818)	818	184	146,850
608	Johnston.....	8,000	5-15	.....	.....	.....	67	534	1,175	923	1,812	200	362,400
609	Newport.....	19,505	5-15	.....	.....	.....	600	1,136	2,378	(2,884)	2,884	200	575,800
610	Pawtucket.....	25,000	5-15	.....	.....	.....	959	(3,782)	3,782	(1,760)	1,760	192	465,280
611	Providence.....	120,000	5-16	.....	.....	.....	3,887	9,034	18,105	6,080	12,840	180	2,455,200
612	South Kingstown.....	5,000	5-15	.....	.....	.....	980	414	1,453	(618)	618	130	111,210
613	Westerly.....	12,000	5-15	.....	.....	.....	9	603	1,165	490	1,015	207	211,538
614	Woonsocket.....	20,000	5-15	.....	.....	.....	1,500	(2,697)	2,697	(1,436)	1,436	135	260,340
SOUTH CAROLINA.													
615	Charleston.....	62,357	6-18	.....	.....	.....	2,319	2,921	5,210	2,127	4,802	196	895,704
616	Columbia.....	12,765	6-18	.....	.....	.....	786	970	1,756	507	1,124	175	196,779
617	Greenville.....	10,000	6-18	.....	.....	.....	200	(1,375)	1,375	(611)	611	180	109,980
TENNESSEE.													
618	Chattanooga.....	36,903	6-21	.....	.....	.....	750	2,070	4,316	(2,650 4)	2,650 4	168	446,779.5
619	Clarksville.....	8,500	6-21	.....	.....	.....	180	533	1,321	439	897	198	179,594
620	Jackson.....	3,840	6-21	.....	.....	.....	.....	(1,307)	1,307	(1,101)	1,101	180	198,980
621	Knoxville.....	39,000	6-21	.....	.....	.....	320	1,531	3,260	1,155	2,489	191	473,412
622	Memphis.....	17,545	6-21	.....	.....	.....	2,000	(5,905)	5,905	(4,002)	4,002	160	595,011
623	Union City.....	5,500	6-21	.....	.....	.....	86	360	793	313	607	160	106,523
TEXAS.													
624	Austin.....	18,000	8-16	.....	.....	.....	1,768	1,309	2,712	977	2,034	170	345,780

a Estimated.

* Statistics of 1886-87.

TABLE 20.—Statistics for 1887-88 of Population and School Enrollment and Attendance in Cities and Towns Containing over 4,000 Inhabitants—Continued.

City or Town.	Total Population, Actual or Estimated, in 1887.	Population 4 to 21.	Population 6 to 14.	School Census Age.	Whole Number of Children of School Census Age.			Estimated Enrollment in Private and Parochial Schools.	Whole Number Enrolled in Public Day Schools, Excluding Duplicates.			Average Daily Attendance in Public Day Schools.			Number of Days Pupils Were Taught.	Total Attendance in Days of Pupils of all Grades.
					Male.	Female.	Total.		Male.	Female.	Total.	Male.	Female.	Total.		
1					6	7	8	9	10	11	12	13	14	15	16	17
TEXAS—continued.																
625 Brenham	6,000	2,530	1,307	7-17	563	594	1,162	50	476	564	1,040	283	316	599	190	114,003
626 Brownsville	5,500	2,265	1,170	6-19	851	823	1,674	150	341	132	533	397		397	202	80,194
627 Denison	15,000	3,302	1,737	8-16	746	798	1,544	.....	700	726	1,426	194	204	398	180	105,420
628 El Paso	10,601	1,333	2,698	6-19	418	357	775	75	338	337	675	158		158	171	68,058
629 Fort Worth	20,000	5,217	11,308	7-18	1,559	1,616	3,175	300	1,090	1,181	2,271	758	820	1,578	200	315,600
630 Galveston	40,518	21,890	11,308	8-16	5,012	5,041	10,053	2,500	1,859	2,323	4,182	1,609	2,079	3,688	170	315,660
631 Houston	36,463	11,110	5,739	8-16	5,012	5,041	10,053	300	1,859	2,323	4,182	1,609	2,079	3,688	170	315,660
632 Palestine	5,000	1,618	836	8-16	355	388	743	105	243	312	555	136	201	337	174	58,679
633 Paris	10,131	5,914	3,055	8-16	2,716	2,716	5,432	200	1,485	1,485	2,967	1,485		1,485	180	190,440
634 Sherman	11,500	3,184	1,644	7-16	2,100	2,100	4,200	500	407	396	803	133	144	297	180	103,440
635 Waco	20,000	5,579	2,882	7-18	1,492	1,485	2,977	.....	492	374	866	586		586	180	245,880
UTAH.																
636 Ogden .....	.....	2,329	1,171	6-18	861	783	1,644	550	492	374	866	586		586	195	114,270
637 Provo City	5,400	1,730	870	6-18	582	639	1,221	225	407	396	803	153	144	297		
VERMONT.																
638 Bennington	4,500	.....	.....	5-20	.....	.....	.....	200	(595)	.....	595	(467)		467	195	91,065
639 Brattleborough	6,500	.....	.....	.....	.....	.....	.....	215	.....	.....	880	.....		.....	180	131,829
640 Rockingham	5,500	.....	.....	5-20	.....	.....	.....	75	(880)	.....	880	(795.4)		795.4	170	100,418.5
641 Rutland	11,000	1,653	794	5-20	.....	.....	.....	549	(855)	.....	855	(669)		669	155.5	128,136
642 St. Johnsbury	6,000	.....	.....	.....	.....	.....	.....	330	(775)	.....	775	(669)		669		104,046.5
VIRGINIA.																
643 Alexandria	14,000	5,234	2,695	5-21	2,575	2,371	4,946	500	886	736	1,622	659	526	1,185	196	232,260

644	Fredericksburg	1,717	884	5-21	760	820	1,590	62	376	428	804	326.1	388.4	714.5	185.7
645	Lynchburg	6,794	3,499	5-21	3,089	3,281	6,280	500	1,410	1,683	3,063	(2.377)			132,680.8
646	Norfolk	8,265	4,253	5-21	3,967	3,951	7,916	1,825	1,400	1,460	2,860	842.5	805.5	2,377	458,761
647	Petersburg	7,918	4,076	5-21	3,765	3,762	7,521	1,825	1,400	1,460	2,860	1,012	805.5	1,648	263,232
648	Richmond	23,415	12,053	5-21	8,672	13,007	21,679	4,009	4,518	1,770	3,288	3,608	5,414	2,244	312,910
649	Staunton	2,081	1,073	5-21	970	957	1,927	75	4,354	6,513	10,867	335.1	360.2	9,022	1,687,114
650	Winchester	1,901	979	5-21	860	900	1,760	75	513	499	1,012	300	267	745.3	137,877
	WASHINGTON.								400	336	766				105,039
651	Tacoma	1,658	829	5-21	750	783	1,533	300	698	703	1,401	(872.2)		872.2	168,334.6
652	Walla Walla	1,249	625	5-21	534	571	1,155	300	539	449	988	(572)		572	114,400
	WEST VIRGINIA.														
653	Charleston*	1,516	783	6-21	625	675	1,300	150	(869)	680	860	300	350	630	173
654	Grafton	2,406	1,243	6-21	1,074	989	2,063	428	715	680	1,395	629	605	1,254	160
655	Martinsburg	3,747	1,935	6-21	1,450	1,762	3,212	350	842	912	1,754	800	876	1,676	194
656	Parkersburg	12,190	6,295	6-21	5,280	5,170	-10,450	700	2,245	2,414	4,659	1,829	1,939	3,768	239,396
657	Wheeling														330,172
	WISCONSIN.														742,296
658	Appleton	3,808	1,843	4-20	1,699	1,901	3,600	503	1,109	1,152	2,261	901	927	1,828	266,393
659	Baraboo	1,146	554	4-20	523	560	1,087	30	446	513	959	(618)		648	115,438
660	Beloit	1,573	761	4-20	709	778	1,487	200	519	612	1,131	(736)		736	117,317
661	Berlin	1,413	684	4-20	683	648	1,336	200	(702)		992	(676)	365	676	175
662	Chippewa Falls	2,614	1,265	4-20	1,138	1,283	2,471	675	483	569	992	337	365	702	180
663	Fond du Lac	5,255	2,543	4-20	2,433	2,530	4,953	500	1,113	1,162	2,255	300	400	1,566	135
664	Port Howard	1,497	724	4-20	694	721	1,415	35	401	438	842	300	(1,566)	700	144,400
665	Racine	8,869	1,360	4-20	1,353	1,303	2,656	600	706	882	1,588	530	(315)	815	160,333
666	Janesville*	4,292	2,077	4-20	2,033	2,020	4,058	600	706	882	1,588	530	(315)	1,145	196,240
667	Kenosha	1,853	897	4-20	2,890	862	1,732	600	353	319	672	1,432	(453)	453	190
668	La Crosse	7,945	3,845	4-20	3,677	3,831	7,511	1,300	2,107	2,091	4,198	1,420	1,420	2,852	196
669	Madison	4,660	2,176	4-20	2,089	2,960	4,319	400	901	937	1,838	728	754	1,452	185
670	Menomonee	1,745	815	4-20	2,869	781	1,650	80	612	595	1,207	(868.8)		156,384	180
671	Merrill	1,398	677	4-20	670	652	1,322	80	(638)		938	(510)		540	95,544
672	Milwaukee	62,790	30,391	4-20	28,736	30,578	59,364	80	(24,626)	21,626	21,626	(17,189)		17,189	3,365,577
673	Monroe	1,852	911	4-20	623	580	1,203	200	336	337	1,235				180
674	Neenah	1,435	635	4-20	882	928	1,730	200	336	338	739	290	325	615	155
675	Oconto	7,493	3,635	4-20	700	657	1,357	200	336	338	739	290	325	615	155
676	Portage	1,783	863	4-20	842	843	1,685	235	452	511	963	(587.2)		587.2	123,000
677	Shawano	7,530	3,645	4-20	3,489	3,630	7,119	1,051	1,517	1,505	3,022	1,137	1,106.4	2,263.2	324,654
678	Sturgeon	5,522	2,673	4-20	2,667	2,554	5,221	1,100	965	967	1,932	(1,236)		2,236	117,444
679	Stevens Point*	8,000	4,221	4-20	2,634	1,357	3,991	350	1,454	824	1,927	1,224	721	1,236	242,570
680	Watertown	3,721	1,803	4-20	1,814	1,707	3,521	900	589	639	1,218	431	445	1,945	196
681	Wauchesa	1,166	564	4-20	558	541	1,102	115	399	425	824	(565.4)		876	399,550
682	Waushara	3,237	1,567	4-21	1,502	1,558	3,050	500	740	740	1,487	(905.5)		905.5	175,200
683	Wausau													565.4	104,596.5
684	WYOMING.														163,030
	Cheyenne							150	464	400	861	(563)		563	190

* Statistics of 1886-87.

a Population between 8 and 16 years.

b Number of State school age (8-16), 612.
c Population of State school age (8-16), 1,462.d Population of State school age (8-16), 2,562.
e Including holidays.

TABLE 21.—Statistics for 1887-88 of Teachers, Accommodations, and Salaries Paid in Public School Systems of Cities and Towns Containing over 4,000 Inhabitants.

	City or Town.	Greatest Number of Teachers Employed in all Day Schools at Any One Time.			Number of Public School Buildings.	Number of Sittings for Study in all Public Day Schools.	Annual Salary of City Superintendent.	Average Annual Salary of all Teachers and Principals.		Are Text-Books Furnished Free?
		Male.	Female.	Total.				Male.	Female.	
	1	2	3	4	5	6	7	8	9	10
ALABAMA.										
1	Birmingham	5	48	53	7	1,888	\$2,000	\$845	\$450	No.
2	Eufaula	2	3	5	2	300	50	305	168	No.
3	Lively	2	5	7	2	500	.....	450	300	No.
4	Mobile	12	56	68	11	.....	.....	.....	.....	No.
5	Montgomery	5	31	36	5	1,640	2,000	720	440	No.
6	Selma	4	15	19	2	861	.....	573	480	No.
7	Talladega	2	7	9	2	450	1,200	750	360	No.
8	Tuscaloosa	4	10	14	4	550	1,500	697	320	No.
ARIZONA.										
9	Tucson	1	10	11	3	700	1,500	1,000	760	aNo.
ARKANSAS.										
10	Fort Smith*	5	17	22	4	.....	1,800	810	504	No.
11	Helena	2	6	8	3	480	.....	1,093	468	No.
12	Hot Springs*	(18)	.....	18	5	950	.....	.....	.....	No.
13	Little Rock	4	49	53	14	3,102	2,100	1,200	503	No.
14	Pine Bluff	3	17	20	4	2,000	1,350	1,000	529	No.
15	Texarkana	4	11	15	3	800	1,000	800	600	No.
CALIFORNIA.										
16	Los Angeles	9	116	125	19	3,955	2,400	1,061	824	No.
17	Marysville	2	8	10	2	550	600	1,620	608	No.
18	Oakland*	12	138	150	14	7,000	2,400	1,391	755	No.
19	Sacramento	5	85	90	12	3,500	2,700	1,530	665	No.
20	San Francisco	46	716	762	76	.....	4,000	1,521	916	No.
21	San José	7	41	48	5	2,091	1,500	(605)	.....	No.
22	Santa Cruz	3	19	22	5	1,250	1,500	990	540	bNo.
23	Santa Rosa	2	17	19	3	940	.....	.....	.....	No.
24	Vallejo	4	15	19	3	.....	450	1,150	923	No.
25	Woodland	2	12	14	3	700	.....	1,013	608	No.
COLORADO.										
26	Aspen	1	8	9	2	450	.....	1,350	792	No.
27	Leadville	3	16	19	4	1,500	2,000	778	610	aNo.
28	Pueblo	4	17	21	3	900	2,000	905	604	No.
CONNECTICUT.										
29	Bridgeport*	4	121	125	18	6,292	2,500	1,675	500	No.
30	Bristol	3	25	28	12	1,321	450	1,182	882	bNo.
31	Derby	7	51	58	9	2,750	.....	846	873	No.
32	East Hartford	3	17	20	13	811	(c)	579	291	aNo.
33	Enfield*	3	27	30	15	1,336	0	967	300	No.
34	Greenwich	4	26	30	20	1,826	.....	.....	371	aNo.
35	Hartford	26	144	170	17	6,926	1,000	d136	d60	Yes.
36	Killingly*	6	27	33	15	1,200	.....	500	380	No.
37	Manchester	2	24	26	9	1,250	290	800	328	eNo.
38	Meriden	8	72	80	14	3,700	800	1,300	460	No.
39	Middletown	4	20	24	3	1,050	2,250	1,300	450	No.
40	Naugatuck	3	18	21	9	872	.....	1,000	378	Yes.
41	New Britain	3	40	43	10	2,235	500	1,633	418	No.
42	New Haven	21	289	310	37	12,057	3,000	1,760	562	aNo.
43	New London	2	42	44	7	.....	.....	1,150	424	aNo.
44	New Milford	11	10	21	13	753	134	d38	d27	No.
45	Norwich	3	29	32	6	1,215	.....	1,600	530	No.
46	Plainfield	(20)	.....	20	11	964	.....	641	305	No.
47	Portland*	2	17	19	8	1,000	.....	1,050	397	aNo.

* Statistics of 1886-87.

a Except to indigent pupils.

b Books are furnished at cost.

c Acting visitors receive \$2 per diem for time devoted to supervision.

d Average monthly salaries.

e Except on physiology.

TABLE 21.—Statistics for 1887-88 of Teachers, Accommodations, etc.—Continued.

City or Town.	Greatest Number of Teachers Employed in all Day Schools at Any One Time.			Number of Public School Buildings.	Number of Sitings for Study in Public Day Schools.	Annual Salary of City Superintendent.	Average Annual Salary of all Teachers and Principals.		Are Text-Books Furnished Free?
	Male.	Female.	Total.				Male.	Female.	
1	2	3	4	5	6	7	8	9	10
CONNECTICUT—cont'd.									
48 Putnam.....	6	11	17	8	.....	(a)	\$590	\$294	No.
49 Rockville.....	12	28	30	10	700	.....	1,200	850	No.
50 Stafford*.....	4	21	25	17	946	.....	.....	.....	.....
51 Stamford*.....	7	63	75	.....	.....	.....	.....	.....	No.
52 Stratford.....	3	19	22	5	998	\$150	1,050	350	No.
53 Thomaston.....	12	13	15	8	625	.....	1,200	362	No.
54 Thompson*.....	5	13	18	13	910	.....	.....	.....	No.
55 Torrington.....	12	19	21	10	960	.....	925	377	No.
56 Wallingford.....	1	19	20	5	1,000	1,800	1,300	391	No.
DAKOTA.									
57 Fargo.....	1	22	23	5	1,210	1,800	1,800	680	No.
58 Sioux Falls.....	1	20	21	4	.....	1,200	.....	450	No.
DELAWARE.									
59 New Castle.....	1	8	9	3	461	.....	1,000	362	Yes.
60 Wilmington.....	1	163	164	24	7,518	1,600	1,300	445	Yes.
DISTRICT OF COLUMBIA.									
61 Washington.....	60	561	621	90	30,650	2,700	929	556	No.
FLORIDA.									
62 Gainesville.....	4	8	12	3	1,100	.....	384	240	No.
63 Key West*.....	4	11	15	2	800	400	.....	.....	No.
64 Palatka.....	5	5	10	4	.....	.....	324	252	No.
65 Pensacola.....	4	17	21	6	1,500	450	321	321	No.
GEORGIA.									
66 Americus.....	4	13	17	2	.....	1,250	472	370	No.
67 Athens.....	5	20	25	4	1,250	1,500	512	355	No.
68 Atlanta.....	12	103	115	13	6,600	2,200	1,150	452	No.
69 Augusta.....	4	46	50	12	2,610	1,800	765	675	No.
70 Columbus.....	5	35	40	6	1,786	1,600	1,400	900	No.
71 Macon.....	4	36	40	7	1,500	2,000	754	380	No.
72 Rome*.....	2	14	16	5	874	1,500	675	495	No.
73 Savannah.....	8	49	57	9	3,700	3,000	1,200	650	No.
ILLINOIS.									
74 Aurora.....	4	44	48	6	2,150	2,000	1,150	445	No.
75 Beardstown.....	2	12	14	4	600	1,200	450	400	No.
76 Belleville.....	12	36	48	6	2,500	2,000	925	383	No.
77 Belvidere.....	1	7	8	1	.....	800	800	329	No.
78 Bloomington.....	2	75	77	11	2,900	1,800	.....	.....	No.
79 Cairo.....	2	22	24	8	1,145	1,800	400	368	No.
80 Canton.....	1	22	23	5	1,065	1,400	1,400	333	No.
81 Centralia.....	3	16	19	4	800	1,000	520	331	No.
82 Chicago.....	72	1,601	1,673	98	82,362	4,500	2,075	740	No.
83 Danville.....	7	41	48	7	2,700	1,700	.....	.....	No.
84 Decatur.....	5	39	44	8	2,650	2,000	951	447	No.
85 East Saint Louis*.....	15	29	44	7	.....	1,500	.....	.....	No.
86 Effingham.....	3	5	8	2	500	720	500	420	No.
87 Elgin.....	3	43	46	11	2,091	1,700	1,178	438	No.
88 Evanston.....	1	21	22	3	915	2,000	700	600	No.
89 Freeport.....	3	32	35	5	1,800	1,800	2,500	422	No.
90 Galena.....	.....	.....	.....	4	1,000	1,200	850	400	No.
91 Galesburg.....	2	40	42	8	2,146	1,800	800	515	No.
92 Jacksonville*.....	0	38	38	7	2,009	810	.....	442	No.
93 Jerseyville.....	3	9	12	3	785	1,800	1,000	382	No.
94 Joliet.....	3	53	56	10	2,450	1,600	1,200	420	No.

* Statistics of 1886-87.

a Acting visitors receive \$2 per diem for time devoted to supervision.

b Except to indigent pupils.

c A small fee is charged for use of books.

d Part of city.

TABLE 21.—Statistics for 1887-88 of Teachers, Accommodations, etc.—Continued.

City or Town.	Greatest Number of Teachers Employed in all Day Schools at Any One Time.			Number of Public School Buildings.	Number of Sittings for Study in all Public Day Schools.	Annual Salary of City Superintendent.	Average Annual Salary of all Teachers and Principals.		Are Text-Books Furnished Free?
	Male.	Female.	Total.				Male.	Female.	
1	2	3	4	5	6	7	8	9	10
ILLINOIS—continued.									
95 Kankakee.....	2	20	22	4	1,150	\$1,350	\$1,050	\$377	No.
96 La Salle.....	4	17	21	5	1,150	1,200	827	471	No.
97 Lincoln.....	2	15	17	2	981	1,200	450	478	No.
98 Litchfield.....	2	15	17	2	952	1,200	800	344	No.
99 Mendota*.....	2	8	10	1	536	1,200	488	422	No.
100 Moline.....	4	38	42	6	1,857	1,800	807	442	aNo.
101 Monmouth.....	0	22	22	4	1,100	1,250	500	500	No.
102 Olney.....	4	13	17	1	842	950	596	299	No.
103 Ottawa.....	2	29	31	7	1,500	1,350	.....	.....	No.
104 Paris*.....	1	21	22	3	900	1,800	.....	.....	No.
105 Peoria*.....	9	115	124	13	5,214	2,500	1,600	510	No.
106 Peru.....	3	16	19	4	776	1,300	675	385	No.
107 Pullman.....	0	21	21	4	1,100	1,800	.....	552	No.
108 Quincy.....	3	59	62	10	3,281	1,500	1,150	481	No.
109 Rock Island.....	4	43	47	8	2,050	1,750	1,250	481	No.
110 Rockford.....	4	74	78	13	3,128	2,000	1,266	446	No.
111 Springfield.....	8	69	77	11	3,210	1,800	1,086	410	No.
112 Sterling (Dist. No. 3).....	1	14	15	2	625	1,500	1,500	425	No.
113 Streator.....	1	31	32	7	1,900	1,300	1,300	400	No.
114 Waukegan*.....	3	17	20	3	825	100	.....	600	No.
INDIANA.									
115 Anderson.....	3	12	15	6	900	1,125	600	416	No.
116 Columbus.....	4	20	24	5	1,403	1,485	574	403	No.
117 Crawfordsville.....	5	21	26	3	1,185	1,600	506	397	No.
118 Elkhart.....	3	41	44	8	1,950	1,700	798	406	aNo.
119 Evansville.....	17	137	154	17	6,477	2,500	874	460	No.
120 Fort Wayne.....	6	114	120	12	4,200	2,500	1,133	.....	No.
121 Goshen.....	3	22	25	4	1,200	1,450	500	376	No.
122 Greencastle.....	3	19	22	4	900	1,500	450	405	bNo.
123 Indianapolis.....	18	280	298	28	12,497	2,750	867	555	bNo.
124 Jeffersonville.....	8	33	41	6	1,924	1,300	585	371	No.
125 Kokomo.....	5	12	17	3	900	1,400	726	415	aNo.
126 LaPorte.....	4	23	27	.....	.....	2,000	1,760	1,066	.....
127 Lawrenceburg.....	5	13	18	2	.....	1,125	551	378	No.
128 Logansport.....	4	34	38	6	1,675	1,500	630	384	No.
129 Michigan City.....	5	17	22	3	1,083	1,500	832	468	No.
130 Mount Vernon.....	7	13	20	4	.....	1,500	501	485	No.
131 Muncie*.....	2	19	21	4	1,300	1,700	750	462	aNo.
132 New Albany.....	10	44	54	12	3,000	1,200	684	370	.....
133 Peru.....	3	13	16	3	950	1,500	700	425	No.
134 Richmond.....	5	55	60	9	2,470	2,200	984	470	bNo.
135 Seymour.....	3	17	20	4	1,350	1,250	495	358	No.
136 Shelbyville.....	4	17	21	3	1,000	1,400	495	385	No.
137 South Bend.....	10	41	51	7	2,800	1,800	.....	.....	No.
138 Terre Haute.....	14	97	111	16	4,707	2,500	780	515	bNo.
139 Union City.....	3	9	12	2	580	1,200	405	391	bNo.
140 Valparaiso.....	2	17	19	2	800	1,400	.....	392	No.
141 Vincennes.....	3	20	23	5	1,086	1,700	825	445	No.
142 Washington.....	6	13	19	4	1,020	1,000	467	340	No.
IOWA.									
143 Atlantic.....	2	18	20	3	915	1,200	625	437	No.
144 Boone.....	1	21	22	4	1,140	1,500	1,500	477	No.
145 Burlington*.....	14	66	80	12	4,000	1,900	1,081	447	bNo.
146 Council Bluffs.....	2	62	64	15	2,816	2,000	825	474	No.
147 Creston.....	4	26	30	8	1,500	1,300	837	383	No.
148 Davenport.....	13	87	100	10	4,286	2,000	1,084	593	No.
149 Des Moines, East.....	1	72	73	9	2,911	1,600	1,200	468	No.
150 Des Moines, West.....	6	106	112	10	3,589	2,000	860	540	No.
151 Dubuque.....	10	74	84	11	3,917	(c)	1,350	411	No.
152 Fort Dodge.....	4	18	22	7	1,002	1,500	520	352	No.

* Statistics of 1886-87.

a Except supplementary readers.

b Except to indigent pupils.

c No city superintendent.

TABLE 21.—Statistics for 1887-88 of Teachers, Accommodations, etc.—Continued.

City or Town.	Greatest Number of Teachers Employed in all Day Schools at Any One Time.			Number of Public School Buildings.	Number of Sittings for Study in all Public Day Schools.	Annual Salary of City Superintendent.	Average Annual Salary of all Teachers and Principals.		Are Text-Books Furnished Free?
	Male.	Female.	Total.				Male.	Female.	
1	2	3	4	5	6	7	8	9	10
IOWA—continued.									
153 Iowa City *	3	27	30	7	1,361	\$1,300	\$665	\$409	No.
154 Keokuk	9	42	51	7	2,217	1,400			No.
155 Lyons	1	19	20	4	1,000	1,400		400	No.
156 Marshalltown	2	40	42	6	2,040	1,800	630	500	No.
157 Mount Pleasant	1	19	20	4	1,088	1,200		387	No.
158 Muscatine	4	38	42	9	1,788	1,500	900	554	No.
159 Oskaloosa	4	29	33	5	1,541	1,450	600	450	aNo.
160 Ottumwa	0	40	40	5	2,000	1,800		464	No.
161 Sioux City *	4	50	54	11	2,400	1,800	750	420	No.
162 Waterloo, East Side	1	17	18	3	750	1,500		399	No.
163 What Cheer	1	15	16	3	900	1,000	1,000	360	No.
KANSAS.									
164 Atchison	6	33	39	6	3,000	1,500	563	400	aNo.
165 Clay Centre	2	15	17	3	1,020	1,200	780	393	No.
166 El Dorado	4	14	18	5	1,104	1,200	460	337	bNo.
167 Emporia	3	36	39	9	1,700	1,600	765	473	No.
168 Fort Scott	8	31	39	8	1,950	1,500	557	383	aNo.
169 Hutchinson	2	19	21	3	1,496	1,200	848	453	No.
170 Independence	5	16	21	4	1,290	1,200			No.
171 Kansas City *	11	45	56	10	3,086	1,500	640	320	No.
172 Lawrence	6	27	33	11	1,736	1,200	555	425	No.
173 Leavenworth	9	47	56	10	3,080	2,400	864	572	No.
174 Marysville *	4	4	8	2	475	1,000	687	450	No.
175 Newton	2	20	22	3	1,259	1,350	630	466	aNo.
176 Ottawa	4	20	24	3	1,400	1,450	596	490	No.
177 Parsons *	7	17	24	4	1,254	1,000			No.
178 Salina	2	22	24	5	1,055	1,500	1,042	432	No.
179 Topeka	8	81	89	19	5,950	2,500	748	504	No.
180 Wichita	13	54	67	17	3,500	1,800	634	465	No.
181 Winfield	2	23	25	4	1,200	1,500	484	438	No.
KENTUCKY.									
182 Bowling Green	(17)		17	2	1,020	1,500		476	No.
183 Covington	7	61	68	6	3,300	1,800			No.
184 Dayton	1	10	11	2	700	1,000	1,000	350	No.
185 Hopkinsville *	1	12	13	1	600	1,300	1,300	441	No.
186 Lexington *	8	39	47	9	2,500	600	850		aNo.
187 Louisville	45	378	423	30		2,500	1,172	522	No.
188 Newport	3	53	56	8	2,850	1,600	1,100		No.
189 Owensborough	3	22	25	4	1,420	1,700	492	334	No.
190 Paducah	7	20	27	8	1,824	1,500	604	364	No.
191 Paris	2	8	10	2	600	1,250	925	512	No.
LOUISIANA.									
192 Baton Rouge *	3	4	7	2					No.
193 New Orleans	25	381	406	51	19,000	3,000	821	430	No.
MAINE.									
194 Auburn	7	50	57	32	1,840		658	365	Yes.
195 Augusta	4	40	44	27	1,636	300	955	277	Yes.
196 Bangor				36	3,509	800	1,281	371	No.
197 Bath	3	34	37	15		300	867	266	Yes.
198 Biddeford	9	37	46	20	1,931	1,500	810	455	No.
199 Calais	3	25	28	14	1,800	300	850	300	No.
200 Deering	2	23	25	16		300	1,100	300	No.
201 Eastport	4	15	19	7	866		535	250	No.
202 Gardiner	3	17	20	12	1,035		700	295	Yes.
203 Lewiston *				28		1,500	1,400	600	Yes.
204 Portland	11	146	157	18	6,289	2,000	1,300	405	cNo.

* Statistics of 1886-87.

a Except to indigent pupils.

b Except supplementary readers.

c About one-half are furnished free.

TABLE 21.—Statistics for 1887-88 of Teachers, Accommodations, etc.—Continued.

	City or Town.	Greatest Number of Teachers Employed in all Day Schools at Any One Time.			Number of Public School Buildings.	Number of Sittings for Study in all Public Day Schools.	Annual Salary of City Superintendent.	Average Annual Salary of all Teachers and Principals.		Are Text-Books Furnished Free?
		Male.	Female.	Total.				Male.	Female.	
	1	2	3	4	5	6	7	8	9	10
MAINE—continued.										
205	Rockland*.....	3	29	32	12	.....	\$300	.....	.....	No.
206	Saco.....	9	23	37	14	.....	300	\$966	\$388	No.
207	Waterville.....	12	19	21	12	.....	1,200	1,300	320	Yes.
208	Westbrook.....	3	24	27	11	1,330	.....	750	310	Yes.
MARYLAND.										
209	Baltimore.....	(994)		994	76	47,266	2,500	1,210	506	Yes.
210	Frederick.....	3	14	17	4	1,000	.....	450	350	Yes.
211	Hagerstown.....	8	23	31	4	1,500	.....	280	280	No.
MASSACHUSETTS.										
212	Adams.....	4	32	36	8	1,630	1,700	967	350	Yes.
213	Amesbury.....	1	27	28	13	1,350	.....	1,600	283	Yes.
214	Amherst.....	6	18	24	10	800	700	558	265	Yes.
215	Arlington*.....	4	23	27	5	1,050	.....	1,500	505	Yes.
216	Athol.....	1	22	23	15	1,060	.....	1,000	275	Yes.
217	Attleborough.....	2	31	33	13	1,250	800	1,100	380	Yes.
218	Beverly.....	4	34	38	9	1,800	.....	720	375	Yes.
219	Blackstone.....	3	20	23	8	1,100	300	630	370	Yes.
220	Boston.....	152	1,069	1,221	.....	.....	4,200	(958)	.....	Yes.
221	Braintree.....	(26)		26	10	870	1,200	750	334	Yes.
222	Brookton*.....	(71)		71	26	.....	2,000	1,500	725	Yes.
223	Brookline.....	6	39	45	13	.....	2,500	1,508	662	Yes.
224	Cambridge.....	19	216	235	23	.....	3,000	1,750	620	Yes.
225	Chelsea.....	4	85	89	12	4,544	2,400	1,750	730	Yes.
226	Chicopee.....	2	21	23	9	1,550	1,700	1,300	374	Yes.
227	Clinton.....	1	35	36	11	1,800	1,600	1,600	452	Yes.
228	Concord.....	1	15	16	3	625	250	1,800	527	Yes.
229	Danvers.....	5	24	29	11	1,300	.....	1,026	300	Yes.
230	Dedham.....	5	33	38	14	.....	1,700	1,220	465	Yes.
231	Easthampton*.....	0	33	33	13	900	.....	.....	450	Yes.
232	Everett.....	2	28	30	6	1,433	.....	1,250	447	Yes.
233	Fall River.....	13	193	206	43	10,334	2,000	1,360	465	Yes.
234	Fitchburg.....	7	64	71	22	3,310	2,000	1,150	400	Yes.
235	Frammingham*.....	2	38	40	16	1,700	1,000	.....	.....	Yes.
236	Franklin.....	2	18	20	13	930	.....	662	335	Yes.
237	Gloucester.....	5	96	101	21	4,264	2,000	1,500	400	Yes.
238	Great Barrington.....	4	20	24	16	1,025	.....	665	294	Yes.
239	Greenfield.....	2	28	30	13	1,013	.....	792	318	Yes.
240	Haverhill.....	5	93	98	25	.....	2,000	1,350	500	Yes.
241	Hingham.....	6	15	21	11	901	1,000	960	431	Yes.
242	Holyoke.....	8	82	90	16	3,208	2,300	1,567	416	Yes.
243	Hopkinton.....	1	21	22	15	.....	.....	1,000	.....	Yes.
244	Hyde Park.....	7	26	33	7	.....	.....	1,257	434	Yes.
245	Lawrence.....	7	122	129	21	5,500	2,200	1,164	422	Yes.
246	Leominster.....	2	22	24	12	1,000	1,500	1,000	400	Yes.
247	Lowell.....	16	180	196	46	9,054	2,600	1,670	578	Yes.
248	Lynn.....	11	136	147	31	7,223	2,250	1,500	525	Yes.
249	Malden.....	3	67	70	12	3,225	2,100	1,333	585	Yes.
250	Marblehead.....	3	23	31	12	1,579	.....	800	418	Yes.
251	Marlborough.....	2	51	53	10	.....	1,700	1,300	368	Yes.
252	Medford.....	8	35	43	12	2,000	2,000	1,700	500	Yes.
253	Melrose.....	1	28	29	10	1,400	.....	2,000	530	Yes.
254	Methuen.....	2	21	23	10	1,068	.....	750	328	Yes.
255	Middleborough.....	3	25	28	19	1,229	1,000	.....	.....	Yes.
256	Millford.....	1	39	40	18	2,193	1,500	1,700	404	Yes.
257	Millbury*.....	3	21	24	7	950	.....	985	416	Yes.
258	Monson.....	5	18	23	15	750	.....	350	300	Yes.
259	Montague.....	2	26	28	11	1,400	.....	634	345	Yes.
260	Nantucket.....	1	12	13	6	.....	.....	1,000	292	Yes.
261	Needham.....	1	14	15	6	720	.....	1,200	440	Yes.
262	New Bedford.....	13	142	155	26	5,200	2,500	1,440	507	Yes.
263	Newburyport.....	4	35	39	12	1,700	800	.....	.....	Yes.
264	Newton.....	15	88	103	21	4,643	2,800	1,967	632	Yes.

* Statistics of 1886-87.

a Except to indigent pupils.

b Class teachers.

TABLE 21.—Statistics for 1887-88 of Teachers, Accommodations, etc.—Continued.

City or Town.	Greatest Number of Teachers Employed in all Day Schools at Any One Time.			Number of Public School Buildings.	Number of Sittings for Study in all Public Day Schools.	Annual Salary of City Superintendent.	Average Annual Salary of all Teachers and Principals.		Are Text-Books Furnished Free?
	Male.	Female.	Total.				Male.	Female.	
1	2	3	4	5	6	7	8	9	10
MASSACHUSETTS—cont'd.									
265 North Adams.....	5	50	55	10	2,000	\$1,900	\$1,237	\$333	Yes.
266 North Brookfield.....	1	18	19	8	.....	1,500	340	Yes.	
267 Northampton.....	4	63	67	25	2,650	1,000	1,175	339	Yes.
268 Northbridge.....	1	18	19	9	992	350	1,200	427	Yes.
269 Peabody.....	5	38	43	8	2,300	.....	1,110	479	Yes.
270 Pittsfield.....	5	71	76	27	3,000	1,500	964	335	Yes.
271 Plymouth.....	5	32	37	25	1,450	1,253	1,000	390	Yes.
272 Randolph.....	3	15	18	8	800	.....	1,119	382	Yes.
273 Rockland.....	5	17	22	10	1,100	.....	714	377	Yes.
274 Salem.....	8	94	102	16	4,463	.....	1,650	562	Yes.
275 Somerville.....	9	111	120	23	6,000	2,000	1,681	593	Yes.
276 Southbridge.....	1	24	25	12	1,420	1,400	1,100	349	Yes.
277 Springfield.....	10	128	138	23	5,898	3,500	1,820	563	Yes.
278 Stoneham.....	2	24	26	7	1,000	.....	1,700	423	Yes.
279 Taunton *.....	4	16	20	11	1,080	500	726	314	Yes.
280 Wakefield.....	9	73	82	33	.....	.....	.....	.....	.....
281 Waltham.....	4	25	29	10	1,468	.....	1,012	462	Yes.
282 Waltham.....	6	53	64	14	3,058	2,300	1,810	540	Yes.
283 Warren.....	3	21	24	12	900	400	650	275	Yes.
284 Watertown.....	4	27	31	8	1,200	2,500	1,487	575	Yes.
285 Webster.....	2	13	15	7	575	.....	750	350	Yes.
286 West Springfield.....	2	25	27	11	1,200	.....	800	350	Yes.
287 Westborough.....	2	21	23	.....	.....	600	1,100	390	Yes.
288 Westfield.....	4	40	44	20	1,500	.....	1,125	434	Yes.
289 Weymouth.....	8	44	52	20	2,600	1,800	936	350	Yes.
290 Winchester.....	2	22	24	9	800	2,000	1,650	668	Yes.
291 Woburn.....	6	42	48	13	2,374	1,800	1,300	500	Yes.
292 Worcester.....	54	278	332	47	13,211	3,500	1,483	535	Yes.
MICHIGAN.									
293 Adrian.....	3	29	32	5	1,792	1,700	1,050	377	No.
294 Ann Arbor.....	7	33	45	7	2,000	2,000	1,035	487	No.
295 Battle Creek.....	2	33	40	4	1,500	1,600	1,000	339	No.
296 Bay City.....	3	73	76	10	4,005	2,000	800	403	No.
297 Cadillac.....	3	12	15	5	761	1,300	450	424	No.
298 Cheboygan.....	2	3	8	2	270	1,000	500	375	No.
299 Coldwater.....	3	20	23	3	950	1,100	817	385	No.
300 Detroit.....	20	397	417	45	20,114	4,000	1,220	587	No.
301 East Saginaw.....	10	90	100	14	4,125	2,500	852	405	Yes.
302 Escanaba.....	1	9	10	2	700	1,200	1,200	400	No.
303 Flint.....	1	37	38	7	1,859	1,500	1,000	338	No.
304 Grand Haven*.....	1	20	21	5	1,332	1,200	432	343	No.
305 Grand Rapids.....	5	201	206	23	8,989	2,500	1,290	502	No.
306 Ionia*.....	4	21	25	4	1,000	1,500	738	450	No.
307 Jackson.....	1	41	42	8	2,175	1,800	1,400	475	No.
308 Kalamazoo.....	3	59	62	9	2,850	2,200	1,050	385	No.
309 Ludington.....	3	26	29	5	1,327	1,300	833	450	No.
310 Marquette.....	2	22	24	5	1,179	1,800	1,800	500	No.
311 Marshall.....	1	21	23	5	1,100	1,500	1,250	357	No.
312 Menominee.....	2	23	24	6	1,068	1,500	1,500	441	No.
313 Monroe.....	1	11	12	4	630	1,200	1,200	327	No.
314 Negaunee.....	1	14	15	4	1,000	1,600	.....	450	No.
315 Niles.....	2	20	22	5	954	1,500	1,150	368	No.
316 Pontiac.....	4	20	24	5	1,160	1,500	1,033	354	No.
317 Port Huron.....	1	37	38	8	1,800	1,600	.....	394	No.
318 Saginaw.....	(57)	57	.....	8	3,000	1,800	.....	.....	No.
319 West Bay City.....	4	36	40	10	2,000	1,500	617	370	No.
320 Wyandotte.....	2	12	14	3	676	1,000	920	330	No.
321 Ypsilanti.....	5	18	23	4	1,000	1,500	1,030	375	No.
MINNESOTA.									
322 Anoka.....	2	16	18	4	800	1,500	913	425	No.
323 Brainerd.....	1	16	17	5	950	1,300	735	450	No.

* Statistics of 1886-87.

a Except supplementary readers.

b Except supplementary readers and music books.

c Except to indigent pupils.

d And tuition fees of non-residents.

TABLE 21.—Statistics for 1887-88 of Teachers, Accommodations, etc.—Continued.

City or Town.	Greatest Number of Teachers Employed in all Day Schools at Any One Time.			Number of Public School Buildings.	Number of Sittings for Study in all Public Day Schools.	Annual Salary of City Superintendent.	Average Annual Salary of all Teachers and Principals.		Are Text-Books Furnished Free?
	Male.	Female.	Total.				Male.	Female.	
1	2	3	4	5	6	7	8	9	10
MINNESOTA—continued.									
324 Crookston.....	1	13	14	4	745	\$1,575	.....	\$425	No.
325 Duluth.....	5	45	50	9	2,304	2,500	.....	505	No.
326 Faribault*.....	2	20	22	7	1,100	1,500	1,250	360	a Yes.
327 Mankato*.....	4	19	23	4	1,075	1,800	500	375	
328 Minneapolis.....	13	398	411	39	18,845	4,000	1,404	620	No.
329 Red Wing.....	2	23	25	5	2,000	1,650	910	470	No.
330 St. Cloud.....	(18)	18	5	5	800	.....	1,200	550	No.
331 St. Paul.....	16	269	285	33	15,810	3,600	1,334	550	No.
332 Stillwater.....	3	87	40	7	1,550	1,900	1,083	497	No.
333 Winona*.....	5	47	52	6	2,800	2,500	890	473	No.
MISSISSIPPI.									
334 Jackson.....	2	10	12	3	.....	1,000	400	280	No.
335 Meridian.....	2	21	23	2	1,457	1,500	750	450	No.
336 Natchez.....	2	21	23	2	1,200	.....	788	360	No.
337 Vicksburg.....	2	25	27	.....	1,600	283	875	490	No.
MISSOURI.									
338 Butler.....	2	10	12	3	680	900	630	360	No.
339 Carrollton.....	5	17	22	3	945	1,500	641	360	No.
340 Carthage.....	4	22	26	4	1,250	1,500	825	409	No.
341 Chillicothe*.....	4	11	15	3	900	1,200	(362)	No.	No.
342 Clinton.....	3	17	20	2	1,170	1,200	640	364	No.
343 Columbia.....	2	12	14	2	700	1,200	600	401	No.
344 De Soto.....	2	8	10	2	900	525	525	266	No.
345 Hannibal.....	3	42	45	6	2,370	1,500	922	332	No.
346 Independence.....	2	14	16	3	750	1,500	356	356	No.
347 Jefferson City*.....	3	14	17	3	850	1,350	765	379	No.
348 Kansas City.....	27	212	239	28	14,379	3,000	1,343	571	No.
349 Lexington.....	3	11	14	4	660	900	504	378	No.
350 Louisiana.....	3	11	14	2	950	1,000	560	284	No.
351 Maryville.....	2	14	16	4	964	1,200	1,162	511	No.
352 Mexico.....	5	13	18	2	960	1,500	664	360	No.
353 Moberly.....	4	21	25	4	1,400	1,850	435	325	No.
354 Nevada.....	3	18	21	3	1,200	1,200	430	319	No.
355 Pierce City.....	2	8	10	4	500	900	415	415	No.
356 Rich Hill.....	4	10	14	2	325	800	333	320	No.
357 St. Charles.....	3	7	10	3	575	1,000	710	500	No.
358 St. Joseph.....	14	84	98	22	4,500	2,500	869	693	No.
359 St. Louis.....	103	1,042	1,145	106	48,774	3,600	1,447	578	No.
360 Sedalia.....	3	41	44	8	2,150	2,000	900	400	No.
361 Springfield.....	5	42	47	9	2,860	2,000	700	366	No.
362 Washington.....	4	3	7	2	410	550	625	375	No.
MONTANA.									
363 Butte City.....	4	29	33	13	1,850	2,000	1,500	776	No.
NEBRASKA.									
364 Beatrice.....	3	23	26	6	1,200	1,500	510	434	No.
365 Fremont*.....	2	19	21	5	1,200	1,200	900	435	No.
366 Grand Island.....	5	23	28	5	1,362	1,650	700	520	No.
367 Hastings.....	1	22	23	4	1,297	1,500	1,500	429	No.
368 Kearney.....	2	22	24	6	860	1,000	.....	491	No.
369 Lincoln.....	5	61	66	10	3,681	1,800	834	523	No.
370 Omaha.....	9	208	217	44	9,540	3,600	1,150	750	Yes.
371 Plattsmouth.....	2	20	22	7	1,000	1,500	1,155	378	No.
NEVADA.									
372 Carson City.....	1	9	10	3	560	2,000	.....	.....	No.
373 Gold Hill.....	1	8	9	3	1,245	.....	1,350	760	No.
374 Virginia City.....	2	19	21	3	1,800	.....	1,200	797	No.

* Statistics of 1886-87.

a Under certain conditions.

b Not including special teachers.

c Except to indigent pupils.

TABLE 21.—Statistics for 1887-88 of Teachers, Accommodations, etc.—Continued.

City or Town.	Greatest Number of Teachers Employed in all Day Schools at Any One Time.			Number of Public School Buildings.	Number of Sittings for Study in all Public Day Schools.	Annual Salary of City Superintendent.	Average Annual Salary of all Teachers and Principals.		Are Text-Books Furnished Free?
	Male.	Female.	Total.				Male.	Female.	
1	2	3	4	5	6	7	8	9	10
NEW HAMPSHIRE.									
375 Claremont.....	1	24	25	22	1,050	.....	\$1,500	\$249	aNo.
376 Concord.....	1	33	39	12	1,850	\$1,350	2,250	460	Yes.
377 Dover.....	2	39	41	19	1,460	1,890	1,300	.....	Yes.
378 Keene *.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
379 Manchester.....	7	69	76	23	.....	1,800	1,215	360	aNo.
380 Nashua.....	2	44	46	16	2,429	1,200	1,600	413	No.
381 Portsmouth.....	(45)	172	45	12	1,650	1,800	1,040	333	No.
382 Rochester.....	3	33	36	21	1,567	250	833	304	bNo.
383 Somersworth.....	2	15	17	8	950	.....	1,200	420	Yes.
NEW JERSEY.									
384 Atlantic City *.....	2	18	20	4	1,166	233	1,000	500	Yes.
385 Bayonne.....	4	44	48	5	1,905	500	1,500	479	Yes.
386 Camden.....	7	172	179	16	9,000	900	900	500	Yes.
387 Elizabeth.....	4	60	64	5	2,902	600	1,650	511	Yes.
388 Gloucester *.....	1	.....	.....	4	699	.....	1,000	475	Yes.
389 Harrison.....	7	3	10	1	450	2,000	1,400	600	Yes.
390 Jersey City.....	17	354	371	21	15,704	3,500	1,492	405	cNo.
391 Lambertville.....	1	12	13	3	670	.....	1,000	417	No.
392 Long Branch *.....	6	24	30	7	1,700	.....	560	556	No.
393 Millville.....	5	39	44	12	1,939	550	742	454	Yes.
394 Montclair.....	2	17	19	2	860	3,000	2,200	635	dYes.
395 Morristown.....	2	18	20	2	896	.....	1,325	487	Yes.
396 Mount Holly.....	2	13	15	3	604	1,200	800	384	Yes.
397 New Brunswick.....	2	47	49	6	2,278	2,000	1,000	423	No.
398 Newark.....	29	367	396	42	19,635	2,800	1,533	867	Yes.
399 Orange.....	2	34	36	4	1,545	2,200	1,500	488	aNo.
400 Passaic.....	1	30	31	5	1,470	.....	1,800	475	Yes.
401 Paterson.....	14	172	186	15	7,876	2,000	1,114	431	Yes.
402 Phillipsburgh.....	3	31	34	6	1,747	1,440	947	371	No.
403 Plainfield.....	2	33	35	4	1,560	.....	700	582	aNo.
404 Rahway.....	4	17	21	4	1,264	400	1,000	415	Yes.
405 Salem.....	4	.....	.....	6	1,140	.....	.....	.....	dYes.
406 Trenton.....	4	79	83	14	3,673	500	1,300	496	Yes.
407 Weehawken.....	3	21	24	1	1,300	.....	1,200	400	Yes.
NEW YORK.									
408 Albany.....	23	247	270	25	12,527	3,000	1,602	500	aNo.
409 Albion.....	2	17	19	6	500	1,800	600	423	No.
410 Auburn.....	4	91	95	15	3,983	2,000	1,150	395	aNo.
411 Batavia.....	1	19	20	5	950	1,800	1,800	413	No.
412 Binghamton.....	6	90	96	9	4,450	2,000	1,100	306	aNo.
413 Brooklyn.....	e 1,528	e 1,528	.....	.....	75,541	.....	.....	.....	.....
414 Buffalo.....	45	607	652	48	.....	4,500	1,408	550	No.
415 Canandaigua.....	3	18	21	4	1,000	1,500	.....	.....	aNo.
416 Catskill.....	2	11	13	2	850	1,400	458	389	No.
417 Cohoes.....	2	47	49	11	2,309	1,500	1,000	500	No.
418 Corning *.....	1	23	24	3	1,450	2,000	2,000	368	No.
419 Cortland.....	(15)	.....	15	4	791	800	.....	340	No.
420 Dansville.....	1	10	11	1	650	1,400	.....	420	No.
421 Dunkirk.....	2	38	40	9	1,600	1,600	1,000	380	No.
422 Ellenville.....	1	13	14	4	600	1,200	1,200	465	No.
423 Elmira.....	6	85	91	8	3,977	1,600	1,400	416	aNo.
424 Flushing *.....	1	22	23	3	1,000	1,700	1,700	550	Yes.
425 Geneva.....	3	20	23	4	1,300	1,500	800	350	No.
426 Gloversville.....	1	26	27	3	1,404	1,500	720	414	No.
427 Green Island.....	1	13	14	2	779	1,400	1,400	550	No.
428 Herkimer.....	1	10	11	2	450	1,350	1,350	436	No.
429 Hoosick Falls.....	4	23	27	3	1,300	.....	800	427	fNo.
430 Hornellsville.....	1	37	38	4	1,813	1,700	1,350	450	No.
431 Hudson.....	2	24	26	2	1,500	1,000	1,200	394	No.

* Statistics of 1886-87.

a Except to indigent pupils.

b Except reading-books.

c Some books are furnished free.

d In part.

e Class teachers only.

f Books are furnished at cost.

TABLE 21.—Statistics for 1887-88 of Teachers, Accommodations, etc.—Continued.

City or Town.	Greatest Number of Teachers Employed in all Day Schools at Any One Time.			Number of Public School Buildings.	Number of Sitings for Studies in all Public Day Schools.	Annual Salary of City Superintendent.	Average Annual Salary of all Teachers and Principals.		Are Text-Books Furnished Free?
	Male.	Female.	Total.				Male.	Female.	
1	2	3	4	5	6	7	8	9	10
NEW YORK—continued.									
432 Ilion	1	18	19	2	984	\$1,700	\$1,700	\$426	No.
433 Ithaca	3	32	35	6	1,841	2,000	840	417	Yes.
434 Jamaica									
435 Jamestown	2	61	63	9	2,228	2,000	1,300	375	No.
436 Johnstown	0	22	22	3	1,284	1,300		397	No.
437 Kingston	7	29	36	5	1,775	1,500	1,243	419	aNo.
438 Lansingburg	1	35	36	4	1,290	1,500	500	400	Yes.
439 Little Falls	4	20	24	4		1,400	950	425	aNo.
440 Lockport	4	48	52	6	2,784	1,350	875	417	bNo.
441 Long Island City	2	72	74	11	3,300	2,000	1,500	428	Yes.
442 Lyons	4	12	16	1	900		747	322	aNo.
443 Malone	1	23	24	10	1,260	800	1,600	400	No.
444 Medina	2	18	20	4	1,025	1,800	1,050	366	No.
445 Middletown*	2	33	35	8	1,702	1,600	850	391	No.
446 Mount Vernon	3	36	39	4	2,000		1,900	540	Yes.
447 New Rochelle	1	18	19	3	800	2,400	2,400	575	Yes.
448 New York	535	3,697	4,252	132	262,532	7,500	1,910	740	Yes.
449 Newburg	7	64	71	6	2,864	1,500	1,171	430	Yes.
450 Ogdensburg*	6	30	36	10	2,000	1,500	750	285	No.
451 Olean	2	29	31	5	1,422	2,000	1,180	412	No.
452 Oswego	2	68	70	14	3,420	1,600	1,250	405	No.
453 Owego	2	28	30	6		1,800	1,300	350	No.
454 Penn Yan	2	15	17	5	900	1,500	1,100	330	No.
455 Plattsburg*	1	30	31	6	1,205	1,700	650	333	No.
456 Port Chester	1	11	12	1	506	1,500	1,500	571	Yes.
457 Port Jervis	2	33	35	5	1,669	1,800	900	368	No.
458 Poughkeepsie	2	70	72	11	2,634	1,600	1,250	407	No.
459 Rochester	16	350	366	31	18,601	2,200	1,433	669	aNo.
460 Rome*	3	34	37	8	1,796	1,600	900	351	No.
461 Saratoga Springs	4	41	45	8	1,950	1,800	1,100	414	No.
462 Seneca Falls	1	22	23	4		200	1,400	370	No.
463 Sing Sing	1	20	21	3	850	1,954		488	No.
464 Syracuse	16	251	267	28	12,072	2,500	1,475	470	cNo.
465 Tarrytown	1	6	7	1					Yes.
466 Tonawanda	2	11	13	1	780	1,050	875	360	No.
467 Troy	19	153	172	16	8,000	2,800	1,314	532	No.
468 Utica	6	159	163	18	5,149	2,500	1,300	421	aNo.
469 Watford	2	16	18	3	772	1,200	900	385	No.
470 Waterloo	4	14	18	4	1,200			403	No.
471 Watertown	2	51	53	9	2,400	1,500	1,500	383	aNo.
472 West New Brighton*	2	13	15	2	625	1,500	1,350	600	Yes.
473 White Plains	1	9	10	1	471	1,500	1,500	525	Yes.
474 Yonkers	4	54	58	7	2,500	3,200	1,400	708	Yes.
NORTH CAROLINA.									
475 Durham	7	8	15	2		1,500	500	343	No.
476 Fayetteville	2	7	9	2	500	1,000	700	271	No.
477 New Berne*	2	7	9	3			270	270	No.
478 Raleigh	7	32	39	5	1,530	1,700	382	268	No.
479 Reidsville	5	5	10	2	400	1,000	333	306	No.
480 Winston	8	10	18	2	998	1,500	1,116	340	No.
OHIO.									
481 Akron	6	84	90	11	4,340	2,500	1,050	480	aNo.
482 Alliance	2	20	22	4	1,175	1,300	650	365	No.
483 Ashabula	3	14	17	3	808	1,300	750	410	No.
484 Bellaire	3	29	32	6	1,575	1,500	648	342	No.
485 Bellefontaine	3	17	20	3	850	1,200	570	365	No.
486 Bucyrus	1	17	18	1	1,000	1,700		380	aNo.
487 Canton*	11	54	65	11		1,800	830	360	No.
488 Chillicothe	3	44	47	5	1,946	2,200	1,033	456	aNo.
489 Cincinnati	122	614	736	56	38,003	4,500			aNo.
490 Circleville*	2	30	32	3	1,450	1,800	550	502	No.

* Statistics of 1886-87.

a Except to indigent pupils.

b Books are furnished at cost.

c Except primary department.

TABLE 21.—Statistics for 1887-88 of Teachers, Accommodations, etc.—Continued.

City or Town.	Greatest Number of Teachers Employed in All Day Schools at Any One Time.			Number of Public School Buildings.	Number of Sitings for Study in all Public Day Schools.	Annual Salary of City Superintendent.	Average Annual Salary of all Teachers and Principals.		Are Text-Books Furnished Free?
	Male.	Female.	Total.				Male.	Female.	
1	2	3	4	5	6	7	8	9	10
OHIO—continued.									
491 Cleveland	34	614	648	52	35,520	\$3,300	\$1,072	\$619	aNo.
492 Columbus	14	205	219	22	10,286	3,000	1,360	602	No.
493 Dayton			177	21		2,500	1,250	600	
494 Defiance*	1	23	24	4	1,150	1,300		432	bNo.
495 Delphos	4	12	16	3	900	1,200	578	371	No.
496 East Liverpool*	1	28	29	6	1,425	1,200		324	No.
497 Elyria	2	20	22	5	1,000	2,000		440	No.
498 Findlay	3	25	28	3	1,500	1,600	450	333	No.
499 Fostoria	5	14	19	3	1,056	1,500			No.
500 Fremont	5	19	24	7	1,150	1,800	675	360	No.
501 Gallon	5	17	22	2	1,420	1,600	677	373	No.
502 Gallipolis	5	24	29	7	1,300	1,200	550		No.
503 Hamilton*	9	37	46	6	2,300	2,000	845	515	No.
504 Ironton	2	42	44	6	1,980	2,000	900	500	No.
505 Lancaster	3	25	28	3	1,360	1,500	933	440	No.
506 Lima*	1	37	38	4	1,700	1,500	1,100	300	No.
507 Mansfield*	2	46	48	9	3,030	2,000	800	475	No.
508 Marietta	3	23	26	7	1,480	1,500	700	465	No.
509 Martin's Ferry	3	18	21	4	990	1,500	450	423	aNo.
510 Massillon*	2	28	30	6	1,594	1,800	725	417	No.
511 Middletown*	1	21	22	3	1,183	1,400		354	No.
512 Mount Vernon	4	21	25	6	1,300	1,650	800	400	No.
513 Nelsonville	1	18	19	2	969	1,300	1,300	290	No.
514 Newark	4	42	46	7	2,533	1,800	875	418	No.
515 Norwalk	1	27	28	6	1,250	1,600	750	459	aNo.
516 Painesville	3	16	19	4	600	1,200	624	428	aNo.
517 Piqua	3	22	25	4	1,315	2,000			No.
518 Portsmouth	3	39	42	6		1,700	567	381	No.
519 Ravenna	3	14	17	3	795	1,500		560	No.
520 Salem*	0	18	18	2	980	1,600		495	No.
521 Sandusky	2	60	62	9		1,800	630	420	No.
522 Sidney	4	20	24	5	931	1,500	517	418	aNo.
523 Springfield	(11)		111	15		1,800			aNo.
524 Steubenville	7	43	50	6	2,253	1,750	1,010	439	No.
525 Tiffin	2	28	30	5	1,400	1,800	600	390	No.
526 Toledo	14	183	197	26	10,000	2,500	743	452	No.
527 Urbana	7	14	21	6	1,000	1,800	750	446	aNo.
528 Van Wert	3	20	23	3	1,150	1,100	435	349	No.
529 Washington C. H.	3	21	24	4	1,000	1,500	950	400	No.
530 Wooster*	2	26	28	5	1,400	1,800	650	420	No.
531 Xenia	6	28	34	6	1,458	1,600	850	450	No.
532 Youngstown	7	50	57	10	3,206	2,000	886	415	No.
533 Zanesville*	7	65	72	16		2,000	500	475	No.
OREGON.									
534 Astoria	1	10	11	2			1,000	560	No.
535 Portland	7	77	84	7	3,600	2,000	1,633	788	No.
536 Salem	5	12	17	3	850	1,000	537	402	No.
PENNSYLVANIA.									
537 Allegheny	19	241	260	22	10,665	2,200	1,179	496	No.
538 Allentown	12	54	66	10		1,500	612	403	aNo.
539 Altoona	9	67	76	12	4,020	1,200	560	332	No.
540 Ashland	3	17	20	4	1,200	1,200	510	412	No.
541 Beaver Falls	1	31	32	3	1,479	1,350	1,350	270	No.
542 Bellefonte	4	11	15	2	800	1,000	440	265	No.
543 Bethlehem	3	11	14	2	865	1,020	600	350	Yes.
544 Braddock	1	16	17	2	900	1,000		450	No.
545 Bradford	0	32	32	6	1,600	1,400		432	No.
546 Bristol	0	15	15	3	890	540		375	Yes.
547 Butler	5	18	23	3	1,345	1,000	360	320	No.
548 Carbondale	6	22	28	8	1,680	400	635	342	No.
549 Carlisle	7	16	23	8	1,100		536	396	No.
550 Chambersburg	4	29	33	5	1,600	800	513	342	No.
551 Chester	0	60	60	10	2,627	1,800		400	Yes.

* Statistics of 1886-87.

a Except to indigent pupils.

b Books sold at cost to pupils of city district.

TABLE 21.—Statistics for 1887-88 of Teachers, Accommodations, etc.—Continued.

	City or Town.	Greatest Number of Teachers Employed in all Day Schools at Any One Time.			Number of Public School Buildings.	Number of Sittings for Study in all Public Day Schools.	Annual Salary of City Superintendent.	Average Annual Salary of all Teachers and Principals.		Are Text-Books Furnished Free?
		Male.	Female.	Total.				Male.	Female.	
1		2	3	4	5	6	7	8	9	10
PENNSYLVANIA—cont'd.										
552	Columbia.....	2	30	32	4	1,700	\$1,400			No.
553	Conshohocken*.....	1	13	14	3	770			\$480	No.
554	Corry.....	2	20	22	4	1,100	1,350			No.
555	Danville*.....	4	26	30	10	700				No.
556	Dubois.....	8	10	18	5	1,150	560	\$306	252	No.
557	Dunmore.....	2	21	23	9	1,050	1,100	600	380	No.
558	Easton*.....	12	45	57	10	2,758	1,600	717	387	No.
559	Erie.....	5	130	135	19	4,200	2,500			No.
560	Greenville.....	6	16	22	2	1,000		456	287	No.
561	Harrisburg.....	18	98	116	21	6,500	1,800	672	439	aNo.
562	Hazleton.....	5	25	30	5	1,792	1,500	535	364	No.
563	Honesdale.....	4	8	12	2	500	1,400	670	360	No.
564	Johnstown.....	7	28	35	6					
565	Lancaster.....	8	68	76	22	4,800	1,500	789	372	Yes.
566	Lebanon.....	7	30	37	8	2,100	800	518	289	No.
567	Lewistown.....	1	12	13	2	504	595	595	280	No.
568	Lock Haven.....	6	21	27	4	1,620	1,100	606	450	No.
569	McKeesport.....	2	40	42	5	2,250	1,500	810	420	No.
570	Mahanoy.....	4	23	27	3	1,600	1,200	517	354	No.
571	Meadville.....	1	45	46	6	2,100	1,500	800	411	
572	Milton.....	2	9	11	2	563	1,000	675	351	No.
573	Monongahela.....	1	15	16	2	1,000		1,100	348	No.
574	Nanticoke.....	4	18	22	5	1,194	1,000	450	400	Yes.
575	New Brighton.....	1	16	17	2	900	1,300	1,200	322	No.
576	Newcastle.....	4	38	42	5	2,250	1,200	522	363	No.
577	Norristown.....	5	48	53	6	2,275	1,400	875	418	Yes.
578	Oil City*.....	3	32	35	7	1,550	2,000	770	430	aNo.
579	Olyphant.....	2	6	8	3	500	720	558	315	No.
580	Philadelphia.....	88	62,304	62,392	213	117,281	5,000	1,375	622	Yes.
581	Phoenixville.....	2	26	28	4	1,400	1,200	612	348	Yes.
582	Pittsburg.....	44	547	591	65	26,000	3,500	1,450	510	No.
583	Pittston.....	3	20	23	6			694	309	aNo.
584	Plymouth.....	6	15	21	4		560	420	270	No.
585	Pottstown.....	2	23	25	9	1,250		625	330	No.
586	Reading.....	5	164	169	27	9,500	2,000	1,020	380	No.
587	Scranton.....	19	186	205	32	8,000	1,800	725	433	No.
588	Sharpsburg.....	1	9	10	1	456		900	380	No.
589	Shenandoah.....	4	34	38	7	2,477	1,650	536	361	No.
590	South Bethlehem.....	8	14	22	3	1,360		551	326	No.
591	South Easton.....	7	12	19	6	1,050	1,000	487	320	Yes.
592	Susquehanna.....	1	8	9	2	570		900	286	No.
593	Tamaqua.....	2	15	17	3	1,200	1,100	800	290	No.
594	Titusville.....	0	34	34	4	1,562	1,200		427	No.
595	Tyrone.....	1	13	14	1	840	1,200	1,200	370	No.
596	Warren.....	2	14	16	4	785	1,800	1,100	415	No.
597	Washington.....	2	18	20	3	1,099	1,000	800	338	aNo.
598	West Chester.....	1	24	25	3	1,078	1,300	650	446	Yes.
599	Wilkes Barre.....	19	82	101	16			788	450	No.
600	Williamsport.....	11	68	79	13	3,625	1,500	714	409	aNo.
601	York.....	19	42	61	13		1,300	474	281	No.
RHODE ISLAND.										
602	Bristol.....	3	21	24	7	1,068	600	867	325	Yes.
603	Burrillville.....	0	22	22	18	1,120	200		306	No.
604	Central Falls.....	1	24	25	5	1,425		1,300	480	No.
605	Cranston.....	0	20	20	10	959	300	554	375	No.
606	Cumberland.....	3	22	25	15	1,134	275	780	395	No.
607	East Providence.....	1	34	35	14	1,360	300	1,200	388	aNo.
608	Johnston.....	3	26	29	15	1,800	300	672	358	No.
609	Newport.....	3	39	42	10	2,386	3,000			aNo.
610	Pawtucket.....	8	74	82	22	4,647	2,000	1,125	560	aNo.
611	Providence.....	23	349	372	60		3,500	1,476	533	aNo.
612	South Kingstown*.....	9	30	39	23	980	425	490	210	No.
613	Westerly.....	9	32	41	15	1,500	200	725	375	No.
614	Woonsocket.....	4	38	42	15	2,061	1,500	900	408	Yes.

* Statistics of 1886-87.

a Except to indigent pupils.

b 33 sewing teachers not included.

c Except in the high schools.

TABLE 21.—Statistics for 1887-88 of Teachers, Accommodations, etc.—Continued.

	City or Town.	Greatest Number of Teachers Employed in all Day Schools at Any One Time.			Number of Public School Buildings.	Number of Sittings for Study in all Public Day Schools.	Annual Salary of City Superintendent.	Average Annual Salary of all Teachers and Principals.		Are Text-Books Furnished Free?
		Male.	Female.	Total.				Male.	Female.	
	1	2	3	4	5	6	7	8	9	10
SOUTH CAROLINA.										
615	Charleston	10	100	110	6	4,509	\$2,500	\$1,400	\$600	No.
616	Columbia	7	20	27	4	1,152	1,500	624	313	No.
617	Greenville	4	14	18	4	.....	1,000	270	225	No.
TENNESSEE.										
618	Chattanooga	11	45	56	5	3,015	1,800	(476)	.....	No.
619	Clarksville	4	14	18	2	954	1,500	388	488	No.
620	Jackson*	3	15	18	6	1,800	1,500	.....	.....	No.
621	Knoxville	18	33	51	9	2,500	1,500	470	470	No.
622	Memphis	12	75	87	12	.....	2,000	484	484	No.
623	Union City	4	8	12	2	840	900	340	304	No.
TEXAS.										
624	Austin	11	59	70	18	2,474	1,800	997	510	No.
625	Brenham	5	14	19	4	1,080	1,200	800	550	No.
626	Brownsville	3	9	12	66	500	1,300	700	400	bNo.
627	Denison	2	21	23	6	1,152	1,500	563	510	No.
628	El Paso	3	12	15	5	550	2,400	862	656	No.
629	Fort Worth	11	30	41	9	1,600	2,000	609	609	No.
630	Galveston	16	69	85	11	4,200	2,400	832	537	No.
631	Houston	10	46	56	13	2,236	2,000	742	450	No.
632	Palestine	4	6	10	3	520	1,500	875	500	No.
633	Paris	5	24	29	4	1,430	1,700	.....	.....	No.
634	Sherman	2	19	21	3	336	1,500	550	550	No.
635	Waco	9	27	36	8	2,010	1,500	590	488	No.
UTAH.										
636	Ogden	4	11	15	.....	1,249	1,500	.....	.....	No.
637	Provo City	6	5	11	4	700	900	750	350	No.
VERMONT.										
638	Bennington	4	10	14	1	656	1,200	632	327	dNo.
639	Brattleborough	6	40	46	17	e125	1,000	1,000	400	No.
640	Rockingham	3	23	26	14	975	.....	1,100	255	Yes.
641	Rutland	1	27	28	6	1,350	400	1,500	444	No.
642	St. Johnsbury	0	30	30	17	1,000	200	.....	f199	No.
VIRGINIA.										
643	Alexandria	7	21	28	4	1,350	380	528	363	bNo.
644	Fredericksburg	2	10	12	4	670	200	575	272	bNo.
645	Lynchburg	16	43	59	10	2,700	1,300	559	380	bNo.
646	Norfolk	6	25	31	7	2,070	600	1,017	526	bNo.
647	Petersburg	4	43	47	9	2,405	1,125	564	424	bNo.
648	Richmond	29	181	210	18	10,296	2,000	477	428	bNo.
649	Staunton	7	14	21	2	1,200	1,010	388	290	No.
650	Winchester	4	8	12	2	600	460	490	300	bNo.
WASHINGTON.										
651	Tacoma	2	25	27	6	1,350	.....	.....	.....	.....
652	Walla Walla	2	12	14	3	.....	1,400	1,200	715	bNo.
WEST VIRGINIA.										
653	Charleston*	3	20	23	4	1,000	1,200	320	320	No.
654	Grafton	5	11	16	3	700	800	500	300	bNo.
655	Martinsburg	6	16	22	6	1,392	200	508	285	No.
656	Parkersburg	9	31	40	5	1,700	1,350	700	400	bNo.
657	Wheeling	6	106	112	11	5,000	1,600	1,100	390	No.

*Statistics of 1886-87.

a Rented from private parties.

b Except to indigent pupils.

c Substitutes not included.

d Except music books and physiologies.

e Paid per diem.

f In District No. 1, \$415.

TABLE 21.—Statistics, for 1887-88, of Teachers, Accommodations, etc.—Continued.

	City or Town.	Greatest Number of Teachers Employed in all Day Schools at Any One Time.			Number of Public School Buildings.	Number of Sittings for Study in all Public Day Schools.	Annual Salary of City Superintendent.	Average Annual Salary of all Teachers and Principals.		Are Text-Books Furnished Free?
		Male.	Female.	Total.				Male.	Female.	
	1	2	3	4	5	6	7	8	9	10
WISCONSIN.										
658	Appleton.....	5	42	47	8	2,600	450	1,020	394	No.
659	Baraboo.....	1	18	19	3	800	300	1,200	366	a Yes.
660	Beloit.....	2	19	21	4	1,600	100	1,100	403	No.
661	Berlin.....	2	18	20	4	1,020	200	990	370	b No.
662	Chippewa Falls.....	1	23	24	6	1,000	1,650	.....	450	No.
663	Fond du Lac.....	1	45	46	19	2,468	400	1,200	353	No.
664	Fort Howard.....	1	16	17	6	850	250	950	340	No.
665	Green Bay.....	1	24	25	6	1,300	350	1,500	433	No.
666	Janesville*.....	2	37	39	6	1,820	1,500	894	322	No.
667	Kenosha*.....	1	15	16	4	700	200	1,500	312	No.
668	La Crosse.....	9	69	78	13	3,695	2,100	1,125	434	Yes.
669	Madison.....	2	40	42	9	1,800	2,000	1,750	380	No.
670	Menomonie.....	3	22	25	7	1,140	200	755	393	No.
671	Merrill.....	1	14	15	4	800	250	900	334	No.
672	Milwaukee.....	57	370	427	33	20,000	3,000	1,139	563	No.
673	Monroe.....	1	16	17	3	.....	1,200	.....	360	No.
674	Neenah.....	1	17	18	5	800	200	1,100	366	c No.
675	Oconto.....	5	10	15	4	975	200	560	410	No.
676	Oshkosh.....	8	52	60	10	.....	600	862	340	No.
677	Portage.....	1	18	19	5	1,210	300	1,350	350	c No.
678	Racine.....	8	50	58	8	3,000	1,200	1,094	386	No.
679	Sheboygan.....	7	21	28	6	2,100	500	729	398	No.
680	Stevens' Point*.....	1	20	21	6	1,025	200	.....	378	No.
681	Watertown.....	3	21	24	5	1,120	1,600	1,800	375	Yes.
682	Waukesha.....	1	14	15	3	800	.....	1,800	401	No.
683	Wausau.....	2	24	26	9	1,277	300	967	380	No.
WYOMING.										
684	Cheyenne.....	1	21	22	3	860	2,000	.....	750	c No.

* Statistics of 1886-87.

a In Grades below the sixth.

b They are owned by the city and rented to pupils.

c Except to indigent pupils.

TABLE 22.—Statistics for 1887-88 of Property and Receipts of Public School Systems of Cities and Towns containing over 4,000 Inhabitants.

CITY COMMON SCHOOL STATISTICS.

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City or Town.	Estimated Actual Value of Public Property Used for School Purposes.				Total Taxable Property of City or Town.			Receipts.						Balance on Hand Year.	Received from Loans and Sale of Bonds.	Total Amount of Funds Available during the Year.
	Grounds or Sites.	Buildings.	Furniture.	Apparatus and Libraries.	Total.	Estimated Cash Value.	Assessed Valuation.	From State Apportionment or Taxes.	From City Apportionments or Taxes.	From County and Other Taxes.	From Tuition Fees.	From all Other Sources.	Total Receipts during Year, excluding Money Borrowed.	15	16	17
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
ALABAMA.																
1 Birmingham	\$22,000	\$77,750	\$5,000	\$2,000	\$146,750	\$35,500,000	\$35,500,000	\$3,242	\$23,078	.....	\$2,525	.....	\$27,815	.....	\$50,000	\$77,945
2 Etowah	300	1,200	400	0	1,900	1,800,000	1,361,834	.....	250	\$175	0	.....	2,033	\$141	0	2,174
3 Lively	250	1,200	50	.....	1,500	500,000	250,000	902	.....	.....	.....	.....	.....	.....	.....	.....
4 Mobile .....	.....	75,000	20,000	3,000	98,000	.....	.....	2,569	15,710	537	3,132	.....	23,048	600	.....	23,048
5 Montgomery	(45,000)	.....	3,000	.....	48,000	.....	.....	1,818	6,615	.....	402	.....	8,835	61,830	.....	10,055
6 Selma	5,000	12,000	1,000	1,150	19,150	1,000,000	800,000	500	1,500	.....	1,700	230	3,950	2,750	12,000	18,700
7 Talladega	10,000	16,000	1,500	1,200	27,700	2,500,000	1,500,000	1,204	3,347	331	1,503	635	7,023	183	18,337	25,003
8 Tuscaloosa .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
ARIZONA.																
9 Tucson .....	.....	(68,200)	.....	225	68,425	.....	.....	.....	(15,054)	.....	.....	280	15,334	.....	.....	.....
ARKANSAS.																
10 Fort Smith*	35,000	65,000	3,000	100	103,100	3,000,000	2,000,000	1,378	4,950	10,804	400	14,562	25,766	.....	0	25,766
11 Helena	3,000	27,000	3,000	200	33,200	3,000,000	1,250,000	.....	.....	0	0	0	6,323	0	0	6,323
12 Hot Springs*	(16,000)	.....	(2,500)	.....	18,500	500,000	247,162	.....	.....	.....	.....	.....	13,771	1,383	.....	13,997
13 Little Rock	80,800	85,300	11,300	500	177,900	19,500,000	7,250,000	9,982	0	41,086	0	0	51,078	19,869	0	70,947
14 Pine Bluff	8,500	12,000	2,000	500	23,000	.....	.....	1,200	.....	9,000	.....	.....	10,200	0	0	11,700
15 Texarkana	2,000	12,000	5,000	3,000	22,000	1,500,000	.....	3,000	5,000	3,500	200	.....	11,700	0	0	11,700
CALIFORNIA.																
16 Los Angeles	278,500	144,000	(19,500)	.....	442,000	75,000,000	40,000,000	54,945	55,044	30,004	329	25,578	155,902	8,003	.....	173,905
17 Marysville .....	.....	(15,000)	.....	1,200	16,200	3,000,000	1,816,635	4,249	4,541	2,346	.....	42	11,178	2,729	.....	13,907
18 Oakland*	151,576	222,900	31,200	7,000	415,726	48,144,727	32,000,485	81,551	59,707	36,414	1,658	.....	179,323	12,456	.....	191,819
19 Sacramento	125,000	105,000	20,000	2,000	252,000	12,000,000	12,000,000	41,471	22,693	8,418	207	20	72,820	1,047	8,406	82,273

α Balance of State appropriation returned to State treasury.

*Statistics of 1886-87.

TABLE 22. — Statistics for 1887-88 of Property and Receipts of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Estimated Actual Value of Public Property Used for School Purposes.					Total Taxable Property of City or Town.		Receipts.						Balance on Hand from Last School Year.	Received from Loans and Sale of Bonds.	Total Amount of Funds Available during the Year.
	Grounds or Sites.	Buildings.	Furniture.	Apparatus and Libraries.	Total.	Estimated Cash Value.	Assessed Valuation.	From State Apporportionment or Taxes.	From City Apporpropiations or Taxes.	From County Taxes, and Other.	From Tuition Fees.	From all Other Sources.	Total Receipts Excluding Money Borrowed.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
CALIFORNIA—cont'd																
20 San Francisco	\$1,930,000	\$1,063,455	\$206,000	\$31,143	\$3,230,598	\$251,746,111	\$622,371	\$20,346	\$206,348	\$11,310	\$822	\$9,587	\$989,128	\$243	0	\$989,371
21 San José	102,600	90,000	5,000	1,200	208,800	2,000,000	2,000,000	8,518	9,963	4,658	512	36	51,063	24,830	0	79,916
22 Santa Cruz	15,000	30,000	5,000	1,250	51,250	6,000,000	2,000,000	8,163	9,543	4,658	160	89	20,593	2,390	0	22,983
23 Santa Rosa	7,000	20,000	5,000	2,576	30,576	6,000,000	3,500,000	11,186	7,660	4,263	155	.....	20,193	4,215	.....	24,411
24 Vallejo	5,000	30,000	5,000	2,576	42,576	3,125,000	2,125,000	6,010	3,997	4,574	.....	.....	13,399	4,232	.....	22,631
25 Woodland	20,000	45,000	2,800	400	68,200	.....	.....	.....	3,997	4,574	.....	.....	14,511	726	.....	15,338
COLORADO.																
26 Aspen	(17,000)	.....	2,500	250	19,750	5,000,000	1,226,835	2,281	(13,981)	.....	.....	105	16,367	2,508	.....	18,875
27 Leadville	10,000	100,000	5,000	1,200	116,200	.....	.....	.....	.....	.....	.....	690	.....	.....	.....	.....
28 Pueblo	33,000	91,000	4,000	400	128,400	.....	.....	10,814	.....	10,827	.....	16,422	33,063	2,552	\$8,700	46,763
CONNECTICUT.																
29 Bridgeport*	(48,000)	.....	5,000	1,000	310,000	25,000,000	15,600,000	.....	69,637	1,823	901	21,267	91,825	.....	.....	18,965
30 Bristol	(137,000)	.....	.....	3,000	54,000	3,500,000	2,300,000	2,952	13,622	.....	32	.....	18,965	.....	.....	18,965
31 Derby	3,000	23,850	1,000	200	140,000	9,000,000	4,656,000	621,691	221,386	.....	.....	1,516	44,598	.....	1,300	44,598
32 East Hartford	1,500	43,350	2,000	1,000	28,050	2,500,000	1,703,040	1,938	5,221	0	0	2,405	9,619	0	0	10,919
33 Enfield*	10,000	31,800	.....	.....	47,850	6,000,000	4,270,807	4,239	8,599	4,952	0	4,589	17,663	0	0	17,663
34 Greenwich	(1,997,900)	.....	.....	.....	41,800	.....	.....	21,611	8,599	.....	.....	.....	12,838	.....	.....	.....
35 Hartford	50,000	.....	.....	.....	.....	2,250,000	2,250,000	.....	9,000	.....	.....	13,002	187,480	0	.....	187,480
36 Killingly*	3,500	62,000	2,000	1,149	68,649	2,000,000	2,907,064	4,214	8,829	.....	.....	3,961	12,961	.....	500	15,433
37 Manchester	55,655	212,841	19,300	1,500	319,305	4,500,000	4,500,000	1,087	9,100	.....	1,141	1,890	14,933	.....	.....	51,248
38 Meriden .....	.....	.....	.....	.....	80,000	4,500,000	4,500,000	2,496	8,232	.....	.....	8,523	19,585	4,836	4,100	28,522
39 Middletown .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,454	12,182	.....	.....	13,636
40 Naugatuck .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
41 New Britain	(235,000)	.....	.....	1,000	256,000	10,000,000	7,000,000	.....	.....	.....	.....	.....	31,530	.....	.....	31,530

42	New Haven	25,000	813,600	49,555,938	41,091	e 180,142	1,930	2,245	225,408	9,121	136,000	370,829
43	New London	500	20,500	7,500,000	5,000	25,000	100	1,000	31,000	0	0	31,000
44	New Milford	2,000	167,000	2,000,000	1,813	4,722	750	681	7,321	1,540	1,000	7,321
45	Norwalk	500	14,100	1,879,957	2,250	4,708	371	0	28,830	0	0	31,370
46	Plainfield	500	2,300,000	1,934,107	2,020,156	7,707	1,867	1,920	11,557	0	900	7,329
47	Portland *	500	210,500	2,000,000	3,506	4,670	273	271	18,000	0	0	18,000
48	Putnam	500	298,500	1,005,000	2,840	5,991	219	2,971	28,117	d 0	0	28,117
49	Rockville	6,500	55,500	1,005,000	2,840	10,685	0	0	28,117	d 0	0	28,117
50	Stafford *	500	32,700	1,528,381	1,798	5,963	85	125	7,846	0	0	15,583
51	Stamford *	2,500	23,500	3,000,000	2,558	13,905	0	3,289	7,846	0	0	7,846
52	Stratford	300	55,000	2,000,000	2,558	13,905	0	0	17,424	0	0	17,424
53	Thomaston	55	55,000	2,000,000	2,558	13,905	0	0	34,811	0	0	34,811
54	Thompson *	55	55,000	2,000,000	2,558	13,905	0	0	34,811	0	0	34,811
55	Torrington	55	55,000	2,000,000	2,558	13,905	0	0	34,811	0	0	34,811
56	Wallingford	55	55,000	2,000,000	2,558	13,905	0	0	34,811	0	0	34,811
57	DAKOTA.											
58	Fargo	200	145,650	2,931,619	6,906	11,335	0	335	20,918	29,013	0	49,931
59	Sioux Falls	100							28,004	2,429		
60	DELAWARE.											
61	New Castle	2,000	15,000	2,000,000	1,495,384	4,300	0	10	5,056	1,519		6,615
62	Wilmington	2,000	400,000	30,673,319	8,608	119,225	0	510	128,373	1,311	0	129,714
63	DISTRICT OF CO-											
64	LUMBIA.											
65	Washington			127,214,025	e 10,116	400,116	0	0	800,232	0	0	
66	FLORIDA.											
67	Gainesville	200	13,200	1,500,000	1,000,000			0		200	0	
68	Key West *	150	12,650	2,000,000	1,500,000	(8,500)	0	825		0	0	
69	Palatka	300	16,555	5,400,000	1,180,059	(2,240)	0	339	2,880	555	0	3,435
70	Pensacola	1,765			2,700,000	10,500	0	0	13,176	430	0	13,606
71	GEORGIA.											
72	Americus	1,900	10,400	2,000,000	1,700,000	7,660	289		8,955	1,359		10,314
73	Athens	2,500	33,800	9,000,000	4,365,000	9,223	780	164	11,104	59	0	11,163
74	Atlanta	25,000	32,000	32,000,000	32,000,000	67,893	4,000		78,498	0	0	78,498
75	Augusta	1,000	46,000	36,000,000	20,000,000	30,000	1,000		35,400	15,023		50,423
76	Columbus	2,500	61,700	10,095,998	6,383,000	(15,461)	2,636		18,150	360		18,510
77	Macon *	200	15,864	10,095,998	2,176		14,470	79	17,653	1,116		18,769
78	ROME *	564	191,000	25,000,000	8,269	6,500	59,148	855	8,890	4,800		13,690
79	Savannah	1,000						613	72,569	1,209	8,686	82,464

d Deficit.

e From United States revenues.

b From State and town taxes.

c Includes district tax and town tax.

* Statistics of 1886-87.

a This amount also includes \$9,400 paid from the general fund of the city as salaries for certain school officers.

TABLE 22.—Statistics for 1887-88 of Property and Receipts of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Estimated Actual Value of Public Property Used for School Purposes.					Total Taxable Property of City or Town.		Receipts.						Balance on Hand from Last School Year.	Received from Loans and Sale of Bonds.	Total Amount of Funds Available during the Year.
	Grounds or Sites.	Buildings.	Furniture.	Apparatus and Libraries.	Total.	Estimated Cash Value.	Assessed Valuation.	From State Apportionment or Taxes.	From City Apportionments or Taxes.	From County and Other Taxes.	From Tuition Fees.	From all Other Sources.	Total Receipts during Year, including Money Borrowed.			
ILLINOIS.																
74 Aurora				\$2,940	\$147,940	\$9,500,000	\$3,572,489	\$2,723	\$26,613	\$32,860		\$31	\$52,227	\$4,575		\$56,802
75 Beardstown	\$3,000	35,000	\$2,500	300	40,800	2,500,000	675,000	1,300	7,700	2,025	\$66	4,375	17,056	1,676	\$1,590	19,332
76 Belleville	40,000	105,000	5,000	3,000	154,000	6,000,000	2,400,000	4,692	23,087			25	33,333	27,270		60,603
77 Belvidere	1,000	10,000	500		11,900	2,400,000	800,000	338	4,009		256			0		
78 Bloomington		(310,000)		1,900	311,900	10,677,870	3,559,290	7,845	37,133			1,712	47,365	26,649		74,014
79 Cairo	12,000	35,000	1,400	900	49,300	4,844,916	1,614,972	2,701	14,000	5,621			15,322	7,183		15,505
80 Canton	9,100	36,200	7,000	1,600	53,900	2,520,000	850,000	1,368	13,286	120	167	34	15,659	3,077		18,766
81 Centralia	3,000	23,000	1,500	1,100	27,600	2,000,000	650,000	1,981	13,286		213	23	15,513	3,375		15,918
82 Chicago	1,335,000	4,220,000	215,000	25,000	5,795,000	6,000,000	180,649,631	133,870	1,724,090	4,365	1,090	225,927	2,089,342			
83 Danville						6,000,000	2,000,000	4,804	(50,167)				50,203	16,811		79,253
84 Decatur	35,000	120,000	4,000	3,000	162,000	8,500,000	2,231,500	4,804	38,489	0		152	43,445	9,413		67,858
85 East Saint Louis	40,000	44,500	5,000	450	89,950	10,000,000	3,500,000	315	6,000	77,747	75	925	78,987	2,100		15,000
86 Effingham	1,000	25,000	3,000	250	29,250	2,000,000	1,200,000	500								9,075
87 Elgin	46,900	77,000	7,450	2,500	156,350	7,553,853	2,631,286									
88 Evansville	12,000	80,000	3,000	200	95,200	7,774,815	1,295,905									
89 Freeport	10,700	75,000		750	86,450	5,719,620	1,429,905	2,818	24,956	162	241	3	28,180	1,487		31,900
90 Galena	1,200	25,000	3,500	1,500	31,200	6,000,000	610,772	2,375	11,668	571		12	14,626	4,490		29,667
91 Galesburg	25,000	125,000	5,000	1,000	156,000	7,500,000	2,500,000	4,309	23,000		69	649	30,927	9,641		22,116
92 Jacksonville	19,700	115,000	10,000	800	145,500		2,091,771			3,547		542	13,714	26,108		64,668
93 Jerseyville	3,000	24,000	1,900	700	27,600	1,750,000	600,000	907	8,000				10,591			10,591
94 Joliet	30,500	121,000	8,500	500	160,500	9,197,820	3,665,940	7,092	40,831				48,795	5,679		50,474
95 Kankakee	12,000	78,200	3,000	600	83,800	3,558,545	3,000,000	2,600	16,900		421		19,929	6,757		30,786
96 La Salle	6,000	25,000	2,000	300	33,300		693,821	3,000		(10,000)		0	0	0		19,069
97 Lincoln	3,450	64,350	1,900	400	70,000	15,000,000	4,000,000	4,757	16,379		128	228	21,492	6,000		23,450
98 Litchfield	2,000	55,000	4,000	500	61,500	2,500,000	675,000	1,670	7,342		304	394	9,710	1,743		23,450
99 Mendota	4,500	50,000	2,500	6,000	63,000			1,757								
100 Moline	20,000	110,000	4,500	2,000	136,500			2,201	33,986	0	234		38,193	2,370		61,030
101 Monmouth	12,750	50,000	2,500	150	63,400			1,365		1,608		1,117	20,137	3,254		74,570
102 Olney	2,500	31,500	2,000	500	42,500	1,362,261	434,087	1,133	6,776	17,655	174	1,360	20,443	2,552		11,995

103	Ottawa.....	(65,000)	750	65,756	4,910,340	1,253,055	2,105	(27,952)	120	78	29,355	11,328	40,683
104	Paris*.....	500	5,000	46,500		7,150,000	9,917	15,000	200	1,200	10,500	4,500	
105	Peoria*.....	75,000	25,000	406,000	25,000,000		7,150,000	78,374		3,798	129,536	12,718	19,604
106	Penn.....	5,000	1,500	22,000				12,845	155		27,450	2,806	28,029
107	Pullman.....	(b)	500	500	13,000,000		1,510	25,910		143	48,504	6,108	54,612
108	Quincy.....	70,000	10,000	191,650	4,514,017	10,128	2,227	38,233	222	374	41,511	8,335	62,792
109	Rock Island.....	28,000	5,000	1,475	6,981,000	3,548	4,637	37,367	942	47	53,243	5,499	73,737
110	Rockford.....	13,987	155,000	180,985	4,672,248	4,637	47	47,667	421	594	62,152	7,628	69,723
111	Springfield.....	(237,372)	2,930	240,302	15,900,000	8,000	8,000	53,017	235	6	11,631	2,597	11,293
112	Stirlingfield.....	4,000	3,000	58,500	3,600,000	1,200,000	1,088	10,304		3,293			33,356
113	Streator*.....	(57,000)	250	57,250				15,144					
114	Waukegan.....	15,000	35,000	53,150									
INDIANA.													
115	Anderson.....	16,000	4,000	21,100	1,109,900	9,917	7,723		16	14	9,977	11,365	21,312
116	Columbus.....	14,000	53,000	74,500	3,006,000	2,159,653		8,772	341		16,836	12,821	29,697
117	Elkhart.....	22,000	80,000	110,000	4,500,000	2,227,927	9,659	15,011	45	1,063	25,718	9,970	35,688
118	Evansville.....	105,000	330,000	450,500	32,000,000	20,825,708	43,576	29,941			73,517	55,321	139,456
119	Fort Wayne.....	62,650	137,000	210,050	13,139,435	13,139,435	43,576				109,009		182,526
120	Goshen.....	12,000	41,000	57,000	2,000,000	10,417	4,284	8,319	26		18,762	7,801	26,563
121	Greencastle.....	12,000	60,000	72,000	2,632,400	4,284			39	1,000	16,771	8,151	24,922
122	Indianapolis.....	217,300	564,000	837,600	49,267,085	108,764	18,877	175,592	376	2,008	329,310	120,067	449,377
123	Jeffersonville.....	10,500	58,700	72,650	3,500,000	2,700,000	18,877	9,038	27	115	28,097	2,001	30,053
124	Kokomo.....	8,000	39,000	52,000	10,000,000	4,231	4,231			608	16,219	5,073	26,417
125	Kokomo.....	11,000	50,000	74,000	3,030,000	1,816,045	21,012	11,380	114	645	23,882	19,337	43,168
126	La Porte.....	4,000	10,000	15,200				(2,060)			12,000	200	12,200
127	Lafayette.....	(148,000)	1,000	148,500	11,000,000	3,698,850	14,114	3,950	407	165	19,151	5,194	24,348
128	Logansport.....	13,500	35,000	55,500	4,630,891	2,259,764	8,648	1,654	11		16,319	10,051	26,373
129	Mount Vernon.....	10,000	28,000	43,000									
130	Muncie*.....	(80,000)	2,000	82,000	14,000,000	8,700,000		5,427	88		5,515	9,149	68,268
131	New Albany.....	21,000	35,000	65,000	3,000,000	1,290,000					14,680		25,482
132	Penn.....	70,000	130,000	215,000	15,000,000	9,140,193					55,959	37,149	93,108
133	Richmond.....	12,000	20,000	36,000	2,231,430			4,984					12,177
134	Shelbyville.....	4,000	39,000	43,000	4,200,000	2,181,810					11,159	5,269	16,438
135	South Bend.....	(160,000)	2,000	162,000	17,453,250	5,817,730	23,535	15,938	121	132	40,146	21,516	61,662
136	Terre Haute.....	(211,872)	2,022	213,904	11,460,700	23,935		2,789	11	162	70,672	27,300	97,972
137	Union City.....	2,000	2,000	2,600									6,253
138	Vanderburgh.....	2,000	45,000	55,000	6,000,000	3,110,000	9,431	6,264	83	3	15,786	16,540	32,335
139	Vanderburgh.....	10,000	47,500	57,500				7,201	79	46	10,193	3,183	13,381
140	Vanderburgh.....	5,000	2,000	51,500									
141	Washington.....												
142	Washington.....												
IOWA.													
143	Atlantic.....	3,000	45,000	50,700			2,264	15,270	139		17,673	6,876	24,519
144	Boone.....	20,000	50,000	71,600	2,500,000		1,500	4,000	300		15,800		16,800
145	Burlington*.....	113,500	25,000	144,500	5,000,000			50,715	155		64,663	267	94,930
146	Council Bluffs.....	52,790	17,950	219,810	16,200,000	5,400,000	4,207	52,788			56,995	33,610	90,635
147	Creston.....	10,000	85,000	100,500	2,200,000	1,000,000	1,800	(22,000)	400		24,600		

a Part of city.

b Buildings are rented.

* Statistics of 1886-87.

TABLE 22.—Statistics for 1887-88 of Property and Receipts of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Estimated Actual Value of Public Property Used for School Purposes.					Total Taxable Property of City or Town.		Receipts.							Balance on Hand from Last School Year.	Received from Loans and Sale of Bonds.	Total Amount of Funds Available during the Year.
	Grounds or Sites.	Buildings.	Furniture.	Apparatus and Libraries.	Total.	Estimated Cash Value.	Assessed Value.	From State Apportionment or Taxes.	From City Appropriations or Taxes.	From County and Other Taxes.	From Tuition Fees.	From all Other Sources.	Total Receipts during Year, including Money Borrowed.	14	15	16	17
IOWA—continued.																	
148 Davenport.....	\$85,000	\$215,000	\$23,000	\$2,000	\$310,000	\$20,000,000	\$4,464,743	\$9,772	\$73,132	.....	\$144	\$321	\$83,659	\$14,024	.....	.....	\$97,693
149 Des Moines, East.....	33,800	157,600	11,400	1,000	203,800	5,321,600	2,960,800	10,395	(60,497)	.....	300	177	69,974	11,913	.....	.....	82,887
150 Des Moines, West.....	70,000	265,000	12,000	1,200	348,200	20,000,000	8,819,610	9,986	50,000	\$89,191	592	394	100,575	.....	.....	.....	155,575
151 Dubuque.....	35,000	150,000	25,000	3,000	213,000	10,000,000	6,000,000	2,070	.....	15,444	135	135	69,256	1,689	.....	.....	61,945
152 Fort Dodge.....	7,000	45,000	5,000	1,000	58,000	2,433,327	811,109	.....	(23,013)	.....	131	.....	17,919	10,866	.....	.....	28,285
153 Iowa City*.....	.....	60,000	.....	500	60,500	4,000,000	2,000,000	.....	.....	.....	856	4,538	28,407	1,774	.....	.....	.....
154 Keokuk.....	.....	100,000	.....	500	100,500	.....	3,325,464	2,036	.....	9,637	.....	.....	41,000	.....	.....	.....	.....
155 Lyons.....	(40,000)	.....	3,000	250	43,250	1,890,000	630,000	.....	.....	.....	174	20	11,563	2,400	.....	.....	14,063
156 Marshalltown.....	10,000	90,000	15,000	1,000	116,000	6,275,000	2,750,000	3,621	34,706	8,973	461	1,881	38,756	5,450	600	.....	44,836
157 Mount Pleasant.....	(38,000)	.....	.....	.....	.....	.....	.....	.....	.....	.....	124	.....	11,298	8,811	8	.....	12,147
158 Muscatine.....	12,000	75,000	5,000	1,500	93,500	3,500,000	1,750,000	3,895	28,822	8,973	124	.....	32,841	272	.....	.....	32,841
159 Oskaloosa.....	31,000	76,000	6,400	1,800	115,200	3,084,705	1,233,802	1,999	.....	25,897	137	103	28,141	600	.....	.....	28,413
160 Ottumwa.....	(120,000)	.....	5,000	2,000	127,000	5,919,784	2,959,892	4,627	.....	31,731	62	.....	33,420	.....	.....	.....	37,020
161 Sioux City*.....	100,000	200,000	20,000	850	320,850	.....	10,000,000	.....	40,672	44,384	.....	.....	85,056	.....	.....	.....	.....
162 Waterloo, East Side.....	(35,000)	.....	1,000	500	36,500	574,210	1,670,000	1,831	11,667	.....	.....	102	13,000	2,150	.....	.....	15,750
163 What Cheer.....	.....	15,000	.....	325	15,325	.....	.....	1,363	9,090	.....	11	.....	10,469	.....	.....	.....	.....
KANSAS.																	
164 Atchison.....	40,000	75,000	9,000	1,000	125,000	10,000,000	3,200,000	5,927	23,671	860	819	75	31,352	8,272	.....	.....	39,624
165 Clay Centre.....	60,000	52,000	1,000	450	113,450	2,129,007	703,669	1,760	2,459	9,625	103	.....	13,947	0	.....	17,000	30,947
166 El Dorado.....	6,000	24,000	9,000	350	39,350	3,032,000	758,000	1,800	10,083	.....	38	485	11,861	.....	.....	.....	11,861
167 Emporia.....	25,000	75,000	15,000	12,000	127,000	10,000,000	2,574,700	3,247	20,000	.....	.....	.....	28,383	1,856	.....	.....	28,239
168 Fort Scott.....	40,000	70,000	5,500	500	116,000	8,466,000	2,116,500	3,667	25,994	283	120	5	29,979	15,429	0	.....	45,408
169 Hutchinson.....	11,000	52,000	3,800	500	67,300	.....	1,767,520	1,479	(13,712)	.....	.....	17	15,208	.....	.....	13,000	28,537
170 Independence.....	6,000	30,000	3,500	500	40,000	2,000,000	750,000	2,200	15,500	330	200	.....	18,200	.....	.....	.....	18,200
171 Kansas City*.....	40,000	60,000	30,000	3,000	133,000	50,000,000	3,937,933	.....	44,843	7,419	.....	7,000	59,267	.....	3,200	.....	62,467
172 Lawrence.....	.....	.....	.....	.....	.....	.....	1,850,207	4,367	15,351	.....	693	8	21,002	63,618	.....	.....	84,620

173	Leavenworth.....	31,000	127,000	21,000	3,500	182,500	5,471,285	2,735,037	8,301	11,049	33,134	1,522	706	64,042	15,243	9,500	79,850
174	Marquette.....	1,000	14,000	1,000	1,000	17,000	1,401,128	320,037	2,015	7,416	7,416	63	1,090	8,506	660		
175	Newton.....	3,000	80,000	1,000	200	64,000	4,000,000	1,253,752	2,803	15,209	15,209	44	13,067	1,599	766		19,720
176	Ontario.....	10,000	50,000	4,000	400	58,000	3,500,000	1,300,400	1,871	12,040	2,000	92	1,471	14,040	360		24,059
177	Paris.....	4,000	60,000	6,500	1,000	100,700	36,000,000	1,923,053	9,794	60,934	1,610	470	1,291	23,475	584		116,740
178	Salmon.....	34,200	69,000	10,000	1,000	432,500	33,000,000	9,000,000	8,207	60,017	690		7,391	74,099	12,641	30,000	102,119
179	Tapehite.....	134,755	100,000	7,000	1,000	242,785	33,000,000	11,000,000	2,728	25,407		130		76,265	25,854		28,277
180	Winfield.....	30,000	62,500	(1,500)		97,000								28,277			
KENTUCKY.																	
182	Bowling Green.....	3,500	21,500	5,000	1,000	31,000		2,000,000	4,000	8,000				12,000	3,353		15,333
183	Covington.....	(133,000)		4,000	0	23,200	16,000,000	16,000,000	22,157	33,825		842	3,094	59,919	21,478	4,900	86,297
184	Dayton.....	3,000	16,000	1,000	1,200	18,000	1,800,000	1,176,155	2,350	5,700	0	0	0	8,650	0	15,500	23,550
185	Hopkinsville.....	50,000	13,000	5,000	1,000	86,000	1,800,000	11,000,000		6,113		360	1,621		1,075		
186	Lexington.....	223,979		(708,924)		992,063	70,152,534	101,333	101,333	194,210		1,778	28,472	325,793	2,835	35,000	363,648
187	Louisville.....	80,000	90,000	2,000	8,000	180,000	8,000,000	7,000,000	15,381	10,260		30	13	22,684	150	8,500	38,534
188	Newport.....	26,000	33,975	2,580	600	69,153	4,500,000	2,800,000	4,476	17,148		470		22,094	146		22,540
189	Owensboro.....	26,000	45,000	3,600	8,000	73,200	12,000,000	4,000,000	7,763	8,000		270		30,033	4,000	20,000	40,633
190	Paducah.....	2,100	10,500	800	8,100	21,500	1,500,000	1,000,000	2,061	4,334				7,015			7,015
191	Paris.....																
LOUISIANA.																	
192	Baton Rouge.....	3,000	6,000	1,000	100	10,100	127,000,000	127,000,000	35,919	600	1,500		250	2,350			209,825
193	New Orleans.....	250,000	400,000	50,000	10,000	710,000				159,167				195,036	14,739		
MAINE.																	
194	Auburn.....		(75,000)		2,000	79,000	5,464,998	4,554,165	5,713	18,500		5		24,218			24,218
195	Augusta.....					77,000	5,750,000	4,708,932	4,583	10,933	11,765	15		27,296	298		27,594
196	Bangor.....			8,500	1,000	125,000	14,000,000	9,629,920	5,227	11,473	0	142	18	16,800	0	0	16,800
197	Bath.....	40,000	72,500	5,000	1,500	103,500	14,000,000	5,913,920	7,202	18,000	0	0	2,000	25,202	930	6,000	32,132
198	Biddeford.....	12,000	85,000			97,000		6,065,680	4,200	7,800	0	0	0	13,200	0	0	13,200
199	Calais.....					80,000		2,647,660	2,689	7,800	0	0	0	10,385	0	0	10,385
200	Dorchester.....	3,000	13,000	2,700	250	18,950	1,200,000	851,601	8,233	4,000		21	6	7,254	1		7,254
201	Eastport.....	15,000	45,000	3,000	1,000	64,000	4,000,000	2,425,000	2,774	7,500		414		10,694	1		10,695
202	Charlton.....													35,089	0		
203	Lewiston.....	108,500	270,000	30,000	10,500	419,000	33,752,040	20,421	97,516	0	0	0	0	117,937	0	0	117,937
204	Portland.....	4,650	35,250	1,200	500	41,100	3,859,027	3,810	8,580				19	12,408			12,408
205	Rockland.....		(35,000)	8,000		43,500	3,348,361	3,207	11,100				64	14,361			14,361
206	Saco.....					52,150	3,489,233	2,226,156	4,195	6,000	0	23	27	10,245	2,037	0	
207	Waterville.....					55,900		2,380,318	3,837	27,566	0	50	0	30,953	0	0	30,953
208	Westbrook.....			1,500	400												
MARYLAND.																	
209	Baltimore.....	495,000	1,300,000	161,362	10,000	1,966,362	263,000,000	263,000,000		579,373	147,403	6,591	248	733,615	0		733,615
210	Frederick.....	2,000	12,500	800		15,300	6,000,000	4,500,000	3,500		6,000		200	8,700		0	8,700
211	Hagerstown.....	3,400	35,000	3,000	50	41,450	6,000,000	3,500,000	4,013		6,170	630	0	10,835	0	0	10,835

*Statistics of 1886-87.

a Sinking fund not included.

240	Haverhill.....	9,000	50,000	1,775	1,500	276,700	10,216,412	16,216,412	64,000	481	809	65,250	0	65,250
241	Hingham.....	4,000	201,266	11,746	1,713	394,221	3,517,928	3,517,928	15,467	45	45	15,512	0	15,512
242	Hopkinton.....	8,406	15,000	1,200	1,200	231,700	2,315,550	2,315,550	123,653	136	804	123,653	0	123,653
243	Hopkinton.....	40,406	15,000	1,200	1,200	231,700	2,315,550	2,315,550	10,150	136	804	11,650	1,302	12,452
244	Hyde Park.....	10,000	30,000	10,000	2,000	378,600	5,963,004	5,963,004	32,889	116	45	33,015	1,349	34,364
245	Lawrence.....	10,000	30,000	10,000	2,000	378,600	27,165,500	27,165,500	0	120	45	85,312	0	85,312
246	Leicester.....	20,000	30,000	50,000	2,000	600,000	56,861,688	56,861,688	176,229	316	5	176,550	1,249	30,000
247	Lowell.....	20,000	30,000	50,000	2,000	600,000	30,830,656	30,830,656	0	79	0	131,079	0	131,079
248	Lynn.....	92,311	(299,866)	500	5,000	304,311	14,481,400	14,481,400	66,811	0	0	66,811	0	66,811
249	Malden.....	5,250	32,200	1,500	100	39,650	5,964,140	5,964,140	97	754	0	17,351	0	17,351
250	Marblehead.....	9,000	60,000	7,000	700	76,700	12,000,000	12,000,000	33,912	0	0	34,018	0	34,018
251	Medford.....	15,000	100,000	20,000	5,000	84,000	7,000,000	7,000,000	76	0	0	24,576	0	24,576
252	Melrose.....	18,000	60,000	5,000	1,000	84,000	3,500,000	3,500,000	283	103	0	10,960	1,714	12,674
253	Melrose.....	6,000	28,400	3,000	500	37,900	3,500,000	3,500,000	208	218	0	15,435	0	15,435
254	Middleborough.....	(51,000)				53,700	4,860,725	4,860,725	20,739	337	46	21,227	0	21,227
255	Milford.....	(27,000)				53,700	4,860,725	4,860,725	212	585	14	3,478	0	3,478
256	Milbury *.....	12,000	45,000	12,800	3,000	70,000	3,537,455	3,537,455	212	112	43	15,222	501	15,723
257	Monson.....	1,000	13,000	3,000	200	21,200	2,074,421	2,074,421	6,350	12	0	6,352	0	6,352
258	Monterey.....	4,000	43,000	25,000	20,000	474,500	32,000,000	32,000,000	9,730	411	181	10,382	0	10,382
259	New Bedford.....	(123,800)				93,700	8,074,737	8,074,737	102,975	735	3,000	106,770	0	106,770
260	Newburyport.....	(97,500)				581,000	7,000,000	7,000,000	20,521	0	175	21,569	0	21,569
261	Newton.....	25,000	105,000	5,000	1,000	133,400	8,000,000	8,000,000	188	349	420	30,957	0	30,957
262	North Adams.....	6,000	25,000	2,000	1,000	34,000	2,500,000	2,500,000	203	402	0	9,105	0	9,105
263	North Brookfield.....	37,000	95,000	10,500	6,000	143,500	9,295,715	9,295,715	46,130	264	16	47,578	631	47,578
264	Northampton.....	5,500	50,000	4,500	4,500	61,500	9,295,715	9,295,715	202	270	20	10,492	1,175	11,667
265	Northbridge.....	30,000	100,000	10,000	1,000	141,000	8,000,000	8,000,000	133	870	0	29,003	0	29,003
266	Peabody.....	8,500	35,000	5,000	2,000	50,000	5,183,955	5,183,955	193	312	0	42,999	330	43,329
267	Plymouth.....	10,000	65,000	5,000	2,000	80,200	2,506,162	2,506,162	83	589	0	21,812	5	21,817
268	Randolph.....	4,000	18,000	2,500	200	24,700	2,379,959	2,379,959	197	130	209	15,039	0	15,039
269	Rockland.....	4,000	18,000	2,500	200	24,700	26,207,000	26,207,000	92,800	298	0	93,785	0	93,785
270	Salmonville *.....	5,050	42,500	2,840	450	50,840	4,736,315	4,736,315	125,567	0	52	125,865	2,627	128,492
271	Southbridge.....	8,000	47,000	5,000	1,400	61,400	3,280,205	3,280,205	187	248	3	184,698	50,271	234,969
272	Springfield.....	5,010	33,300	3,500	350	42,150	2,389,870	2,389,870	63	0	405	10,905	0	10,905
273	Stoughton *.....	15,000	115,000	7,700	750	139,450	5,500,040	5,500,040	10,500	0	0	19,708	1,500	21,208
274	Warefield.....	43,640	172,252	20,014	9,255	245,292	12,298,825	12,298,825	53,015	40	0	53,055	0	53,055
275	Wareham.....	4,000	50,000	12,000	1,000	67,000	3,000,000	3,000,000	201	87	25	10,911	0	11,359
276	Wareham.....	23,925	70,000	5,500	2,605	102,925	6,741,035	6,741,035	74	25	0	25,500	0	25,500
277	West Springfield.....	2,000	43,000	2,000	1,000	48,000	2,290,841	2,290,841	236	386	0	7,772	0	7,772
278	West Springfield.....	10,000	100,000	5,000	4,000	113,000	3,091,824	3,091,824	61	4	1,131	14,256	0	14,256
279	West Springfield.....	36,000	113,000	15,000	5,000	165,000	7,900,000	7,900,000	206	30	132	14,388	525	14,913
280	West Springfield.....	36,000	113,000	15,000	5,000	165,000	8,555,351	8,555,351	139	41	0	35,012	5,564	40,576
281	West Springfield.....	36,000	113,000	15,000	5,000	165,000	8,555,351	8,555,351	131	50	1,028	35,012	13,480	48,492

* Statistics of 1886-87.

a Transferred from reserved fund.

b Balances transferred to other departments.

c Covered into town treasury.

d Does not include \$12 which lapsed into city treasury at the end of the fiscal year of the city.

TABLE 22.---Statistics for 1887-88 of Property and Receipts of Public School Systems of Cities and Towns containing over 4,000 Inhabitants---Continued.

City or Town.	Estimated Actual Value of Public Property Used for School Purposes.					Total Taxable Property of City or Town.		Receipts.								Balance on Hand from Last School Year.	Received from Loans and Sale of Bonds.	Total Amount of Funds Available During the Year.
	Grounds or Sites.	Buildings.	Furniture.	Apparatus and Libraries.	Total.	Estimated Cash Value.	Assessed Value.	From State Apportionment or Taxes.	From City Appropriations or Taxes.	From County and Other Taxes.	From Tuition Fees.	From all Other Sources.	Total Receipts During Year.	Money Borrowed.				
I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
MASSACHUSETTS—continued.																		
230 Winchester.....	\$18,000	\$75,000	\$8,000	\$1,000	\$102,000	\$6,000,000	\$4,328,505	\$55	\$18,000		\$3,186	4	\$18,063			\$18,063		
231 Woburn.....					75,000		8,000,000	179	37,983		\$192		38,354	\$1,709		40,063		
232 Worcester.....	245,700	780,950	44,482	13,793	1,084,925	70,952,900	64,502,636	0	246,772	0	107	784	247,663	0	0	247,663		
MICHIGAN.																		
233 Adrian.....					105,000			3,791	12,609		412		20,002	2,181		22,183		
234 Ann Arbor.....	37,000	120,000	2,500	5,500	165,000		5,530,300	9,692	19,700		9,258	352	35,402	1,912	\$17,514	54,828		
235 Battle Creek.....	18,000	133,000	8,000	12,000	171,000													
236 Bay City.....					188,500	9,730,950	9,730,950	8,013	51,788		64	190	60,055	14,346		74,402		
237 Cadillac.....	4,450	18,100	4,800	750	28,100	2,000,000	800,000	1,333	10,683			31	101	4,065	4,500	20,702		
238 Cheboygan.....	1,400	11,000	1,275	450	14,125	1,300,000	1,300,000	1,458	(3,700)		187	0	5,345	1,000		6,345		
239 Coldwater.....	8,000	50,000	4,000	1,000	63,000													
230 Detroit.....	388,500	998,500	5,000	8,000	1,387,000	152,299,140	152,299,140	71,875	398,196	0	918	29,142	500,131	9,965	0	510,093		
301 East Saginaw.....	4,000	160,000	5,000	8,000	177,000	10,000,000	10,000,000	9,805	67,164		351	2,328	79,618	995	5,000	85,693		
302 Escanaba.....					42,900													
303 Flint.....					165,000	5,000,000	4,570,511	9,082	15,502	155	1,624	629	26,992	10,023	9,167	46,182		
304 Grand Haven*.....	5,000	50,000	3,000	3,000	61,000													
305 Grand Rapids.....					662,500	42,555,860	21,277,930	15,543	164,472	0	1,730	6,499	188,244	11,503	63,250	262,997		
306 Ionia*.....	6,000	50,000	3,000	1,500	60,500													
307 Jackson.....	26,000	90,000	5,000	1,000	122,000	2,700,000	2,000,000		14,099		1,137	4,654	19,890	1,186		47,813		
308 Kalamazoo.....	40,000	100,000	15,000	45,000	200,000	15,000,000	7,004,000	5,135	30,835	6,614	681	6,965	50,233	5,629	13,000	65,239		
309 Ludington.....					120,000								30,497			30,497		
310 Marquette.....	14,000	45,000	2,000	1,600	62,600	5,600,000	3,016,000	2,418	19,402		24	2	21,846	582		22,428		
311 Marshall.....	15,000	85,000	2,500	1,500	104,000	2,000,000	1,800,000	1,466	10,815		466		14,761	2,415		15,176		
312 Menominee.....	12,000	32,000	5,000	300	49,300			3,593	14,411	2,466		2,820	23,326	5,274	10,000	28,600		
313 Monroe.....	3,000	30,000	1,000	2,000	36,000			2,333	2,200	0	0		47,766	4,798	30,000	52,564		
314 Negaunee.....	2,000	40,000	2,000	100	44,100	3,000,000	2,250,000	4,731	13,000	0		35						

315	Niles	5,000	45,000	1,908	550	52,458	2,000,000	1,800,000	1,572	13,068	.....	200	1,001	15,331	1,120	.....	17,051
316	Pontiac*	12,000	85,000	4,500	3,000	101,500	2,431,500	2,431,500	9,086	10,000	.....	780	7,242	18,022	6,350	.....	23,071
317	Port Huron	.....	.....	.....	.....	102,000	6,000,000	4,338,000	5,086	(13,500)	.....	160	10,623	33,369	10,569	0	43,538
318	Saginaw	18,050	116,262	8,777	3,357	166,446	.....	.....	9,086	37,940	.....	213	38	43,268	12,478	17,000	72,746
319	West Bay City	8,000	61,000	4,000	2,000	75,000	2,500,000	1,980,350	3,227	10,947	513	222	.....	21,000	530	17,000	38,539
320	Ypsilanti	5,500	30,000	3,500	3,000	42,000	.....	.....	1,436	6,500	.....	84	.....	8,020	1,238	.....	9,253
321	Xenia	5,000	42,000	2,500	5,000	51,500	.....	.....	.....	.....	.....	.....	.....	14,613	.....	.....	.....
MINNESOTA.																	
322	Anoka	7,000	33,000	6,500	800	47,300	3,200,000	1,459,000	1,400	9,836	1,443	88	829	13,701	3,020	6,350	.....
323	Brainerd	20,000	35,000	.....	600	.....	.....	1,614,212	2,142	(10,284)	.....	.....	.....	12,426	10,593	.....	27,019
324	Crookston	10,000	40,000	3,000	500	53,500	3,000,000	1,100,000	3,143	40,114	13,605	631,506	.....	101,080	63,134	64,596	170,829
325	Duluth	116,500	118,302	17,818	4,304	200,324	32,972,000	55,084,033	3,143	13,222	1,818	200	4,407	22,017	632	34,000	60,270
326	Ferdinand*	10,000	75,000	1,500	1,000	87,000	4,000,000	2,000,000	17,418	.....	.....	.....	.....	17,418	156	25,774	25,774
327	Mapletope*	(45,924)	.....	8,163	1,500	53,527	.....	2,431,115	111,103	(329,727)	0	364	156,032	537,296	121,635	246,952	968,913
328	Minneapolis	514,000	1,000,000	40,000	20,000	1,574,000	3,200,000	1,765,000	16,404	9,930	0	84	.....	21,017	2,981	0	24,028
329	Red Wing	10,000	50,000	3,000	2,400	65,000	3,000,000	1,700,000	4,159	.....	0	320	0	438,213	2,000	20,000	34,155
330	St. Cloud	13,500	34,000	2,000	500	50,000	3,000,000	90,828,593	1,365	.....	0	575	.....	40,833	7,163	60,172	108,173
331	St. Paul	505,000	1,098,580	(108,420)	.....	1,712,500	7,000,000	5,000,000	2,777	32,235	4,200	621	.....	69,715	12,365	.....	.....
332	Still Water	43,500	127,000	6,000	3,000	179,500	12,000,000	6,000,000	25,463	5,347	.....	78	.....	.....	.....	.....	.....
333	Winona*	50,000	230,000	10,000	2,000	262,000	.....	6,500,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
MISSISSIPPI.																	
334	Jackson	7,500	20,000	.....	0	27,500	.....	3,500,000	2,500	10,000	.....	200	.....	12,700	900	.....	.....
335	Meridian	5,000	6,000	3,500	8,000	15,500	7,000,000	2,000,000	2,091	6,727	1,310	0	0	10,028	0	0	10,028
336	Natchez	.....	.....	4,500	250	36,750	8,000,000	3,850,000	2,700	16,000	218	.....	1,800	20,718	.....	.....	20,718
337	Vicksburg	4,000	28,000	4,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
MISSOURI.																	
338	Bolton	5,000	25,000	1,500	100	31,000	.....	700,270	983	4,971	1,343	61	175	7,553	256	2,537	10,326
339	Carrollton	11,000	45,500	3,000	500	60,000	2,000,000	1,500,000	1,104	11,106	1,590	227	379	14,406	3,182	.....	17,588
340	Cardano	18,250	37,000	2,500	3,250	61,000	2,500,000	1,742,497	4,645	12,280	816	238	162	18,131	3,256	.....	21,367
341	Chillicothe*	30,000	40,000	2,000	2,000	39,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
342	Clinton	4,000	41,000	5,000	1,000	50,000	3,340,200	1,113,430	2,062	(6,893)	12,525	61	.....	14,618	3,623	.....	18,271
343	Columbia	3,500	16,000	1,500	500	21,500	3,443,115	1,147,705	2,997	4,206	287	164	408	9,385	1,962	.....	11,337
344	De Soto	2,000	22,400	1,000	200	20,000	8,700,000	2,900,000	5,337	(24,618)	.....	215	1,460	34,650	2,353	69,067	40,717
345	Franklin	13,500	38,000	2,000	600	14,000	4,000,000	1,500,000	2,438	6,802	.....	44	8	9,307	1,009	.....	10,316
346	Independence	4,000	20,000	2,000	200	4,200	2,500,000	1,312,789	33,612	223,368	13,175	362	6,692	285,093	68,763	43,430	397,352
347	Jefferson City	636,165	505,100	(62,500)	1,000	12,000	3,900,000	1,300,000	3,328	3,781	.....	25	.....	7,733	561	.....	8,990
348	Kansas City	2,000	1,000	1,000	3,000	24,000	.....	1,036,575	1,550	0	.....	.....	0	4,232	826	0	5,118
349	Lexington	2,500	16,500	2,600	1,000	54,000	4,100,522	1,386,814	1,992	11,418	352	162	.....	13,324	4,366	.....	18,880
350	Louisiana	5,000	45,000	3,000	1,000	28,000	2,601,404	1,254,955	3,817	8,071	.....	361	.....	10,279	1,075	.....	11,354
351	Maryville	2,000	25,000	4,000	600	28,000	3,000,000	1,200,000	3,604	.....	.....	213	.....	14,621	1,288	.....	15,812
352	Mexico	6,000	40,000	3,000	1,500	50,000	1,500,000	987,763	3,020	.....	9,112	274	11	12,417	2,337	.....	14,804
353	Moberly	12,000	35,500	3,700	1,000	22,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
354	Nevada	2,000	20,000	1,000	50	22,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
355	Pierce City	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

* Stades of 1886-87.
 α Owing to a change in the fiscal year this statement covers the period between March 15, 1887 and September 1, 1888.
 β From building fund.
 γ From bond issue of 1885.
 δ Deficit.

TABLE 22.—Statistics for 1887-88 of Property and Receipts of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Estimated Actual Value of Public Property Used for School Purposes.					Total Taxable Property of City or Town.		Receipts.						Balance on Hand from Last School Year.	Received from Loans and Sale of Bonds.	Total Amount of Funds Available During the Year.
	Grounds or Sites.	Buildings.	Furniture.	Apparatus and Libraries.	Total.	Estimated Cash Value.	Assessed Valuation.	From State Apportionment or Taxes.	From City Apportionments or Taxes.	From County and Other Taxes.	From Tuition Fees.	From all Other Sources.	Total Receipts During Year, Excluding Money Borrowed.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MISSOURI—cont'd.																
356 Rich Hill.....	\$2,400	\$14,000	\$835	\$100	\$17,335	\$1,800,000	\$612,000	\$1,286.		(\$3,109)		\$5	\$9,400	\$2,005	0	\$11,405
357 St. Charles.....			2,000	2,500	24,500	3,500,000	1,913,115	2,536	\$1,988		\$50		4,574	1,569	\$1,863	8,006
358 St. Joseph.....			(175,163)		238,168	60,000,000	18,000,000	25,418	77,755		114	3,758	107,045			
359 St. Louis.....			(2,635,436)		3,528,449	299,786,270	224,839,700	97,649	856,417		1,097	116,172	1,071,305		11,328	1,092,633
360 Sedalia.....		75,000	10,000	1,000	121,000	10,000,000	3,350,000	3,353		\$25,061	290		28,704	361		29,565
361 Springfield.....		240,000	10,000	5,000	365,000	12,000,000	5,021,823	7,153	23,925		500		36,578	12,349	20,425	60,352
362 Washington.....		10,000	300	200	10,900		560,500	2,068	1,965	723	130		4,886	169		5,055
MONTANA.																
363 Butte City.....		(77,000)	(7,000)		84,000		7,500,000			43,757			43,757	3,530		47,287
NEBRASKA.																
364 Beatrice.....	31,500	45,000	1,500	500	78,500	6,785,770	1,357,151	2,902		16,237	175	7,123	26,437	1,771		28,208
365 Fremont.....	13,000		(30,000)	1,000	44,000				8,000	7,592	128		15,720	7,646		
366 Grand Island.....	40,000	60,500	2,297	650	103,447	2,901,048	725,262	3,018					23,484	10,610		
367 Hastings.....	42,000	78,000	12,000	1,000	133,000	10,000,000	2,000,000	18,347	15,479	0	29	12,516	33,855	9,028	0	42,883
368 Kearney.....	22,000	65,000	2,000	400	89,400		878,598			(13,686)		4,020	17,706	10,510		28,216
369 Lincoln.....	190,000	185,000	15,000	2,500	392,500	24,000,000	4,800,000	12,251	64,316		60	42,673	119,300	17,732		137,032
370 Omaha.....	790,000	420,000	25,000	18,000	1,253,000	25,000,000	21,000,000	29,198	433,905		78	18,697	481,878		201,885	683,733
371 Plattsmouth.....	10,000	39,000	4,000	1,500	54,500		600,000									
NEVADA.																
372 Carson City.....	700	15,000	1,200	500	17,400	1,200,000	1,100,000	4,431	0	5,660	0	0	10,091	0	0	10,091
373 Gold Hill.....	15,000	25,000	10,000	1,800	51,800	850,000	572,000	4,825		4,749			9,574	8,911	0	9,574
374 Virginia City.....		(25,500)		1,000	26,500	2,985,000	1,163,788	10,091	(11,563)		28	5	21,690		0	30,001

NEW HAMPSHIRE.		(40,560)	2,000	1,000	43,960	2,023,392	2,023,392	519	8,674	125	59	9,407	1,617	600	
375	Claremont.....							17,713	8,287	858	9,294	36,152	0	11,624	
376	Concord.....	4,000	135,000	1,000	142,000		8,130,130	1,286	27,087	163	24	28,560	27	36,152	
377	Dover.....		2,000	1,000				15,397	58,543	103	662	16,111	2,104	28,560	
378	Keene.....				350,000		21,005,476		58,543	230	0	58,773	0	58,773	
379	Manchester.....		4,000	10,000	232,385	9,912,573	9,912,573	1,573	31,829	227	0	36,629	8	36,629	
380	Nashua.....	25,000			39,380		6,353,925	1,218	22,500	134	212	24,064	0	24,064	
381	Portsmouth.....		1,865	1,580	53,380	3,500,000		5,505	2,700	252	820	14,021	140	21,061	
382	Rochester.....	6,147	46,787						11,014	141		13,341	372	21,061	
383	Somersworth.....	8,500	40,000	500	50,000		1,700,000	500	12,500					13,713	
NEW JERSEY.															
384	Atlantic City *.....	20,000	51,000	3,000	80,000	10,000,000	3,687,722	7,385	11,000	0	706	19,094	8,441		
385	Bayonne.....	18,000	107,000	5,000	130,000	16,000,000	8,500,000	12,151	25,650	0	12	37,813	84	0	37,813
386	Camden.....		(375,000)		378,000	25,900,000	15,500,000	(116,373)		0	0	165,373	0	0	165,373
387	Elizabeth.....	(101,000)		(11,000)	112,000	15,000,000	13,292,475	36,263	16,800		807	53,890	40,410	0	94,300
388	Gloster.....	3,000	10,000	2,000	35,000	3,000,000	2,000,000	7,000	2,100			9,100	2,743	11,813	
389	Harrison.....		2,000	1,000	16,000	2,000,000	68,630,635	5,260	1,200			252,994	1,212	7,260	
390	Jersey City.....	(628,000)	23,700	14,030	653,730	2,250,000	1,800,000	5,260	1,200		138	6,963	296	0	7,260
391	Lambertville.....	3,000	17,000	(2,000)	22,000	3,916,656	2,460,000	8,908	17,000	340	104	30,287	7,291	30,000	
392	Long Branch *.....	9,000	120,000	5,000	140,000	6,000,000	2,871,300	8,328	15,500	504	104	26,103		07,488	
393	Millville.....	7,500	40,000	12,000	56,000	6,000,000	5,000,000	6,791	11,500	473	488	19,242	4,826	26,103	
394	Montclair.....	10,000	40,000	4,000	70,000	10,000,000	1,900,000	15,527	3,313			42,352	552	24,063	
395	Morris Town.....	8,000	59,700	2,000	13,500		96,800,000	236,738	111,000	229	381	331,179	34,640	42,884	
396	Mount Holly.....	(10,000)		500	138,000		5,557,000	53,126	18,385	774	35	31,935	627	42,884	
397	New Brunswick.....	361,000	(300,500)		1,200,500	11,114,000	3,810,000	8,891	8,000			136,178	0	136,178	
398	Newark.....				105,000		2,700,000	11,273	7,343	0	0	18,730	1,781	0	20,511
399	Orange.....				90,370		9,250,000	9,804	19,446		784	31,002	764	-710	32,477
400	Passaic.....	33,072	(300,850)	4,000	313,922		3,552,475	7,096	8,500			15,566	1,042	16,628	
401	Paterson.....	9,627	22,700	2,980	36,415		4,500,000	6,168	5,628	845	48	33,421	11,956	38,777	
402	Phillipsburg.....	22,000	100,000	8,025	131,025		14,916,000	41,458	14,795			56,252	27,504	3,000	86,756
403	Plainfield.....		53,000	300	39,600	25,000,000	2,000,000	8,891	8,000			16,891	3,204	20,095	
404	Rahway.....				175,500										
405	Salem.....	89,633	74,200	2,467	65,000	8,000,000									
406	Trenton.....	27,000	45,000	4,000	65,000										
407	Weehawken.....	12,000													
NEW YORK.															
408	Albany.....	170,000	600,000	40,000	885,000	67,572,355	51,959	153,770	0	1,584	5,153	212,466	97,637	310,123	
409	Albion.....		21,500	450	34,957		2,005,070	3,865	6,943	0	1,365	12,158	0	12,158	
410	Albany.....	75,000	190,000	12,000	280,000	11,760,695	15,137	65,789		1,332	1,035	83,203	31,015	114,308	
411	Albany.....	10,500	89,000	3,500	110,500	4,200,000	3,010,429	4,477	(13,456)	431	74	18,438	1,488	19,926	
412	Binghamton.....	56,431	184,258	11,881	262,489	15,567,685	13,805	49,000		1,531	113	64,419	1,520	65,969	
413	Brooklyn.....				3,529,509										
414	Buffalo.....	319,000	913,450	110,614	1,288,192		119,876,145	97,799	466,788	11,634	300	573,889	279,375	859,264	
415	Cannadagui.....	50,000	50,000	5,000	72,000		4,105,195	3,032	5,000	554	1,516	14,032	45	14,097	
416	Catskill.....	3,000		500	33,500		2,618,150	2,197	5,000	0	135	7,332	0	7,332	

* Appropriation for evening schools not included.

b Owing to a change in the fiscal year these figures cover 15 months.

* Statistics of 1886-87.

TABLE 22.—Statistics for 1887-88 of Property and Receipts of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Estimated Actual Value of Public Property Used for School Purposes.					Total Taxable Property of City or Town.		Receipts.							Balance on Hand from Last School Year.	Received from Loans and Sale of Bonds.	Total Amount of Funds Available During the Year.	
	Grounds or Sites.	Buildings.	Furniture.	Apparatus and Libraries.	Total.	Estimated Cash Value.	Assessed Valuation.	From State Apportionment or Taxes.	From City Apportionments or Taxes.	From County and Other Taxes.	From Tuition.	From all Other Sources.	Total Receipts During Year, Including Money Borrowed.					
NEW YORK—cont'd.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
	Cohoes	\$10,000				\$110,000	\$11,000,000	\$11,000,000	\$12,022	\$31,494			\$428	\$43,044	\$20,364		\$23,408	
	Cornwall	11,000	\$85,000	1,500	\$800	98,300	3,674,334	1,837,167	3,562	14,401			4,894	19,720	6,458		11,388	
	Cortland	3,500	14,800	2,400	250	20,950	1,500,000	1,500,000	2,100	7,500				3,562	7,776		35,445	
	Dansville	2,500	30,000	3,000	1,500	37,000	2,000,000	1,983,824	6,268	19,209			420	26,596	5,256	\$22,000	31,852	
	Dunkirk	30,000	84,000	5,000	2,860	121,860	7,000,000	342,030	2,548	6,356	0		95	87	90,834		9,516	
	Ellenville	(25,000)			1,000	26,000	1,000,000	1,000,000	15,111	16,087			888	36	2,380		83,232	
	Elmira	75,000	282,000	16,700	4,400	378,100	12,694,017	12,694,017	4,006	7,451			954	246	4,727		16,815	
	Flushing*	11,000	54,700	5,000	2,000	72,700	5,000,000	2,001,186					586	75	6,001			
	Geneva	6,000	40,000	2,000	1,800	49,800	4,341,186	4,341,186	4,006									
	Gloversville	8,000	24,000	2,500	1,500	36,000	2,700,000	1,798,000	2,701	7,275			4	0	9,980	1,917	0	
	Green Island	3,000	17,000	1,000	400	21,400	1,665	5,040						201	6,906	0	11,897	
	Herkimer	7,984	47,000	7,500	1,500	63,984	3,000,000	2,540,727	4,309	17,464			463	0	22,236	0	6,906	
	Hoosick Falls	15,000	53,000	4,000	1,500	73,500	7,600,000	4,455,911	7,803	19,143	0	164	108	3,947	27,218	6,304	22,236	
	Hornellsville	12,900	33,000	3,700	3,588	52,258	5,747,996	5,563	9,700	5,563	0		323	893	16,602	6,086	22,688	
	Ilion	5,000	18,000	3,000	4,000	30,000	1,125,240	1,125,240	8,977	20,247	0	383	19	31,268	31,368	2,670	16,693	
	Utica	40,000	90,000	6,000	2,000	138,000	6,000,000	2,739,748	2,236	6,613	0	2,135	388	0	31,638	0	12,445	
	Jamaica	43,350	80,000	3,250	5,748	136,948	8,500,000	3,080,462	1,748	18,943	8,557	2,943	210	32,401	32,401	2,683	12,445	
	Johnstown	10,000	45,000	7,000	6,088	66,088	4,836,320	2,268,160	3,412	12,387	0	311	1,780	13,891	13,891	9,000	32,954	
	Kingston	51,000	112,000	5,800	3,500	172,000	10,000,000	5,000,000	8,270	24,699	0	3,173	284	34,456	34,456	0	28,575	
	Lansingburg	9,000	36,000	3,000	2,000	50,000		5,000,000	6,363	15,619	0	1,173	0	118	22,000	755	34,456	
	Little Falls							1,232,280	4,617	17,165	150	2,845	242	1,031	23,055	1,819	2,060	25,115
	Lockport	12,500	40,000	5,000	6,000	63,500	9,129,000	6,086,000	9,016	27,900	0	0	958	3,729	43,640	3,129	46,769	
	Long Island City	12,000	70,000	3,000	2,000	87,000	27,000,000	9,113,843	11,351	31,979	0	0	0	958	54,017	22,571	25,115	
	Lyons	4,000	11,000	3,000	2,336	20,336		1,600,000	2,631	3,979			933	39	12,982	788	3,129	13,770
	Malone	10,000	50,000	2,500	4,000	66,500		2,033,902	3,691	12,812	0	963	1,116	0	18,489	0	8,903	18,489
	Medina	7,000	24,000	4,000	1,811	36,811	8,336,000	2,224,000	3,899	6,893			763	0	2,836	0	14,391	14,391
Middletown	20,500	50,000	7,000	4,500	82,000		3,298,470		20,402	5,913	633	1,060	28,068	28,068	0	28,068	28,068	
Mount Vernon	23,000	100,000	4,000	4,000	131,000	3,500,000	2,438,262	5,035	35,382			200	475	41,062	51,945	113,862		

447	New Rochelle.....	12,000	50,000	6,000	3,000	71,000	5,000,000	2,000,000	3,073	17,615	0	171	0	20,859	11,853	0	32,722
448	New York.....	5,021,742	8,124,500	522,775	322,830	14,001,847	1,306,310,133	9,330,819	683,953	3,642,416	0	420	0	4,331,374	0	4,231,374	0
449	Newburg.....	30,000	200,000	15,000	25,000	270,000	20,000,000	9,330,819	11,389	45,019	0	420	0	55,581	229	755	57,565
450	Ogdensburg*.....	16,883	63,500	1,280	3,535	85,263	5,632,082	5,632,082	8,642	15,072	0	842	0	193	22,925	0	40,472
451	Olean.....	18,000	62,000	6,000	3,000	80,000	6,000,000	2,008,223	5,283	33,669	0	235	0	118	15,420	0	40,472
452	Oswego.....	27,140	135,000	10,120	6,451	179,801	12,000,000	9,000,000	13,290	33,669	0	440	0	879	48,278	0	40,472
453	Owego.....	20,000	135,000	10,120	6,451	179,801	12,000,000	9,000,000	13,290	33,669	0	440	0	879	48,278	0	40,472
454	Pain Yan.....	20,000	135,000	10,120	6,451	179,801	12,000,000	9,000,000	13,290	33,669	0	440	0	879	48,278	0	40,472
455	Plattsburg.....	7,500	15,000	5,000	2,480	37,980	2,000,000	1,200,000	2,694	14,083	0	1,114	0	793	9,698	0	9,698
456	Port Chester.....	10,000	23,000	3,000	1,000	42,000	3,000,000	1,437,081	2,131	14,083	0	368	0	8,681	23,132	0	2,601
457	Port Jervis.....	14,000	45,000	4,000	3,000	66,000	3,000,000	1,437,081	2,131	14,083	0	368	0	8,681	23,132	0	2,601
458	Poughkeepsie.....	23,600	101,105	6,500	21,122	153,627	11,636,685	11,636,685	12,800	31,500	0	379	0	22,379	5,030	16,120	43,459
459	Rochester.....	135,000	510,000	45,000	21,000	711,000	77,390,525	77,390,525	50,518	292,000	0	2,363	0	1,037	32,053	0	333,227
460	Rome*.....	21,000	61,000	2,800	1,200	76,000	2,000,000	1,200,000	8,053	27,400	0	410	0	7,911	22,994	0	63,703
461	Saratoga Springs.....	36,000	55,000	5,000	1,500	107,500	5,000,000	1,814,750	5,881	14,267	0	385	0	782	36,601	0	63,703
462	Seneca Falls.....	8,500	35,000	2,200	2,010	41,000	5,000,000	1,814,750	5,881	14,267	0	385	0	782	36,601	0	63,703
463	Sing Sing.....	9,000	19,000	2,400	1,200	31,000	40,000,000	34,322,540	42,007	187,255	0	252	0	12	10,031	0	26,624
464	Syracuse.....	218,000	635,000	40,000	45,000	998,000	40,000,000	34,322,540	42,007	187,255	0	1,704	0	856	231,792	0	300,020
465	Tarrytown.....	17,000	50,000	1,300	1,000	58,000	3,000,000	1,000,000	2,356	9,000	0	0	0	21	7,771	0	7,165
466	Tonawanda.....	2,500	18,000	1,300	1,000	58,000	3,000,000	1,000,000	2,356	9,000	0	0	0	21	7,771	0	7,165
467	Troy.....	50,000	450,000	15,000	3,000	518,000	80,000,000	47,431,173	23,993	67,000	0	1,287	0	1,308	92,683	0	100,393
468	Utica.....	93,121	231,753	26,632	28,339	379,845	25,000,000	18,119,325	23,993	67,000	0	1,287	0	1,308	92,683	0	100,393
469	Watford.....	7,000	10,000	1,000	900	18,900	2,500,000	988,478	2,969	6,710	0	7	0	412	10,098	0	10,098
470	Watertown.....	3,550	30,500	3,500	3,500	41,050	5,000,000	2,008,156	2,783	7,915	0	585	0	1,787	13,101	0	13,595
471	Watertown.....	3,550	30,500	3,500	3,500	41,050	5,000,000	2,008,156	2,783	7,915	0	585	0	1,787	13,101	0	13,595
472	West New Brigh- ton*.....	2,500	25,000	1,500	500	23,500	5,000,000	1,000,000	9,431	25,500	97	650	0	40	35,727	0	35,727
473	White Plains.....	10,000	25,000	5,000	3,000	43,000	5,000,000	1,231,584	1,200	11,535	0	45	0	551	15,355	0	15,355
474	Yonkers.....	22,625	103,200	9,000	10,000	204,825	20,277,580	20,277,580	11,118	62,995	0	125	0	121	74,359	5,100	94,545

NORTH CAROLINA.

475	Durham.....	2,000	3,500	150	25	5,675	3,500,000	2,674,286	1,400	10,500	0	400	0	1,800	3,600	0	0
476	Fayetteville.....	2,500	12,000	2,800	25	42,823	2,000,000	1,250,000	8,200	1,566	0	105	0	1,012	11,500	0	0
477	New Bern*.....	1,200	1,500	3,500	4,000	42,500	2,000,000	1,250,000	8,200	1,566	0	105	0	1,012	11,500	0	0
478	Raleigh.....	1,200	1,500	3,500	4,000	42,500	2,000,000	1,250,000	8,200	1,566	0	105	0	1,012	11,500	0	0
479	Reidsville.....	1,200	1,500	3,500	4,000	42,500	2,000,000	1,250,000	8,200	1,566	0	105	0	1,012	11,500	0	0
480	Winston.....	(35,000)															

OHIO.

481	Alton.....	135,000	265,000	85,000	15,000	500,000	20,000,000	9,615,000	11,070	87,513	1,501	833	123	101,075	50,820	0	131,885
482	Alliance.....	15,000	110,000	5,000	1,200	131,200	5,500,000	1,740,750	4,260	18,757	0	43	6,259	25,319	4,019	0	33,333
483	Ashtabula.....	3,000	45,000	5,000	800	53,800	2,000,000	2,948,966	1,730	9,894	9,053	6	10	19,110	12,161	0	31,272
484	Bellaire.....	5,000	45,000	5,000	300	55,300	2,000,000	2,948,966	1,730	9,894	9,053	6	10	19,110	12,161	0	31,272
485	Bellevue.....	16,000	80,000	3,000	1,000	100,000	5,384,870	2,567,890	2,576	14,307	0	228	495	17,607	7,118	238	24,963
486	Bucyrus.....	60,000	190,000	8,000	2,000	250,000	7,500,000	7,500,000	5,821	52,034	9,365	0	0	63,490	37,288	20,082	120,860
487	Canton.....	30,000	100,000	5,000	15,000	156,000	8,500,000	5,602,732	5,821	27,965	0	153	417	31,356	15,167	49,553	0
488	Chillicothe.....	20,000	110,000	5,000	1,500	136,500	4,418,803	3,725,863	8,239	794,887	1,387	8,572	5,839	937,474	39,017	0	976,521
489	Cincinnati.....	20,000	110,000	5,000	1,500	136,500	4,418,803	3,725,863	8,239	794,887	1,387	8,572	5,839	937,474	39,017	0	976,521
490	Circleville*.....	20,000	110,000	5,000	1,500	136,500	4,418,803	3,725,863	8,239	794,887	1,387	8,572	5,839	937,474	39,017	0	976,521

* Statistics of 1886-87.

a The financial statement is for 10 months.

b Deficit \$3,154.

c Includes tuition fees.

TABLE 22.—Statistics for 1887-88 of Property and Receipts of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Estimated Actual Value of Public Property Used for School Purposes.					Total Taxable Property of City or Town.		Receipts.						Balance on Hand from Last School Year.	Received from Loans and Sale of Bonds.	Total Amount of Funds Available During the Year.
	Grounds or Sites.	Buildings.	Furniture.	Apparatus and Libraries.	Total.	Estimated Cash Value.	Assessed Valuation.	From State Apportionment or Taxes.	From City Apportionments or Taxes.	From County and Other Taxes.	From Tuition.	From all Other Sources.	Total Receipts During Year, Including Money Borrowed.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Ohio—continued.																
491 Cleveland	\$281,200	\$678,900	\$10,450	\$26,000	\$1,026,550	\$93,628,410	\$93,628,410	\$94,653	\$167,792	\$98,883	\$754	\$18,279	\$680,361	\$112,212	0	\$792,603
492 Columbus					450,000	80,000,000	38,735,690	35,520	208,599		810	476	245,405	31,569	\$50,435	327,409
493 Dayton					85,000	6,000,000	2,500,000		7,265	3,276		164	10,920	12,095		16,943
494 Defiance*	3,500	80,000	4,000	1,000	88,500		2,500,000	2,630	7,698	0	104	0	10,492	6,451	7,109	20,564
495 Delphos					52,500		1,100,000		5,936	2,066		963	8,965	4,490		31,433
496 East Liverpool*	(50,000)		2,000	500	82,500		2,187,000									
497 Elyria						4,000,000	2,000,000			10,668	0	886	13,876	6,011	0	19,887
498 Findlay	18,000	75,000	8,000	500	101,500	5,150,000	1,750,000	1,976	346		0		61	20,883	0	32,558
499 Fostoria	18,000	40,000	5,000	1,500	64,500	3,000,000	2,175,000	2,951	17,024	0	267	61	20,883	11,675	0	32,558
500 Fremont	15,000	40,000	4,000	1,000	62,000	3,000,000	2,175,000	2,951	17,024	0	32	0	14,578	2,096	0	16,674
501 Gallon	10,000	80,000	10,000	5,000	105,000	3,600,000	2,000,000	2,978	11,568	0	6	62	16,459	832	0	17,291
502 Gallopis	5,700	33,000	3,500	200	42,500	3,225,985	2,419,489	3,275	13,116		191	797	47,340	11,564	0	31,217
503 Hamilton*	35,000	100,000	13,000	2,000	150,000		6,500,000	5,194	20,666	700	410	0	27,000	7,217	0	34,217
504 Ironton	20,000	70,000	(10,000)	1,000	100,000	5,400,600	3,373,476	5,194	20,666	700	410	0	27,000	7,217	0	34,217
505 Lancaster	12,000	70,000	2,500	1,000	85,500	5,400,000	3,373,476	2,908	17,781	485	200	0	21,374	7,888	0	29,262
506 Lima*	16,000	60,000	15,000	200	91,200	2,745,630	2,745,630	5,185	18,365	485	200	282	23,932	9,742	18,500	52,174
507 Mansfield*	23,000	169,000	10,000	500	212,500		3,500,000	5,185	18,365	485	200	282	23,932	9,742	18,500	52,174
508 Marietta	5,000	33,000	2,500	1,000	40,000	3,500,000	2,438,000	1,400	4,665	6,941	53	21	49,591	9,030	0	20,648
509 Martin's Ferry					42,100		2,438,000	2,810	288	10,425		63	13,586	6,514	0	20,648
510 Massillon*					40,000		2,438,000	2,810	288	10,425		63	13,586	6,514	0	20,648
511 Middletown*	20,000	80,000	4,000	500	104,500	4,000,000	3,622,870	4,887	29,761			917	26,757	7,827	0	20,262
512 Mount Vernon	6,000	74,000	2,000	1,000	83,000	6,000,000	3,200,000	3,126	13,195			917	26,757	7,827	0	20,262
513 Nelsonville	21,000	35,000	2,000	400	62,400	5,000,000	2,500,000	3,126	13,195			898	17,229	23,893	0	41,122
514 Newark					92,000	2,000,600	750,000	2,221	(9,466)		0	7,155	18,842	1,688	0	20,530
515 Norwalk	15,000	80,000	2,200	1,800	99,000	5,368,590	2,634,295	3,303	17,852	0		136	21,431	11,613	0	33,074
516 Painesville					50,300		2,400,000	3,303	17,852	0		136	21,431	11,613	0	33,074
517 Piquette	5,000	75,000	3,500	1,500	85,000	4,500,000	3,100,600	4,399	17,821	502		1,005	23,727	30,051	0	45,700
518 Portsmouth	90,000	80,000	5,000	5,000	180,000		3,100,600	4,399	17,821	0		488	23,727	30,051	0	45,700
519 Ravenna							1,666	1,666	11,813			254	28,361	13,759		42,123

520	Salom*	5,000	45,000	2,500	400	52,000	12,500,000	5,300,000	8,973	15,322	2,263	430	791	18,852	8,681	9,590	78,716
521	Sandusky					150,000	1,500,000	5,866,910		40,491	493	235		50,192	19,064		
522	Sidney					275,000			13,704	77,037	308		189	91,231	16,872	10,185	118,392
523	Springfield					151,000	5,092,190	5,092,190	6,711	35,504	59	300	405	42,984	17,620	60,602	35,602
524	Tiffin					125,000	6,000,000	3,218,000	4,297	20,087	0	80	40	24,504	11,117		85,621
525	Stuebenville					753,000	55,000,000	31,500,000	52,853	163,531	1,016	726	1,569	219,635	37,227	14,908	271,930
526	Toledo	(728,000)				97,000	6,000,000	3,618,450	2,957	3,618,897		145	0	24,915	7,465	11,227	43,638
527	Urbana					63,000	2,000,000	1,420,000	2,200	13,600	1,000	50		16,550	20,294	9,040	46,214
528	Van Wert					93,000	3,500,000	2,021,915	1,050	15,867	141	84	798	17,910	7,780	0	25,070
529	Washington C. H.					122,000				14,613	70	54	3,637	18,374	8,465		
530	Wooster*					89,550	4,000,000		12,055	40,477	0	263	603	53,453	29,025	0	73,553
531	Xenia					353,000								60,712	19,670		
532	Youngstown*																
533	Zanesville*																
OREGON.																	
534	Astoria	17,000	38,000	3,000	350	58,250	15,000,000	3,000,000	1,229	10,059	5,670	190	0	17,153	2,908	0	20,065
535	Portland	100,000	275,000	10,000	1,000	395,000	22,000,000	14,500,000	6,417	47,614	53,716	1,506	13,250	122,543	7,459	1,800	131,842
536	Seaside	7,000	42,000	3,000	150	92,120	2,231,512	1,673,833	2,309	8,589	4,668	159	348	16,073	1,216	4,280	13,569
PENNSYLVANIA.																	
537	Allegheny					1,169,514	30,000,000	48,000,000	15,675	228,437	0	0	8,569	252,031	68,172	146,127	466,980
538	Allentown					469,200	15,000,000	8,220,679	5,202	50,467	0	79	4,458	57,206	3,263	9,428	70,877
539	Altoona					255,000	15,000,000	11,667,233	5,215	49,324	0	215		51,754	23,654	78,408	78,408
540	Ashtand	(37,500)				40,700	1,952,315	1,312,230	1,533	14,350	0	178	166	16,227	281	1,200	17,708
541	Beaver Falls					73,400		1,150,220	1,553	15,174	0	200	40	16,967	0	0	16,967
542	Belleville					51,450	2,905,419	968,483	808	9,275		50	35	10,168	8,430	18,568	18,568
543	Bethlehem					88,461		2,704,015	1,203	12,897	223	0	512	14,235	375	10,000	25,210
544	Bradford					51,000	2,176,355	1,724,045	994	23,218		40		13,284	51	13,335	13,335
545	Bradford					57,000	3,000,000	1,035,581	1,473	9,670	0	520	0	25,211	430	0	25,671
546	Bristol					37,581	2,038,405	1,179	9,670	0	89	20	10,958	640	0	11,598	10,631
547	Butler					53,400	2,000,000	700,164	806	9,825		0		15,424	0	8,145	23,569
548	Carbondale					33,800	3,000,000	875,000	1,666	13,758	0	93	123	16,220	158	0	16,888
549	Carlisle	(40,000)				53,600	3,500,000	2,256,325	1,880	14,519	0	314	70	16,874	60	8,000	24,871
550	Chambersburg																
551	Chester					53,600											
552	Columbia	(36,584)				45,384		2,681,445	2,030	15,592	0	101	394	18,117	66	5,273	23,456
553	Conshohocken*	12,000	30,000	3,000	1,200	46,200	3,635,000	2,725,000		10,900	41	422	972	12,355	429		
554	Corry									11,897	199		1,965	13,968	2,478		
555	Danville*					57,000		500,000									
556	Du Bois	5,000	25,000	2,500	200	32,700		488,650	1,211	12,737	1,463	0	15,411	773	0	16,186	40,419
557	Dunmore	5,000	23,500	6,000	500	25,000		8,172,920				25	3,209	41,685	1,734	3,000	76,836
558	Easton*	(227,700)				240,300		16,000,000	5,693	65,533	0	63	503	71,817	5,019	0	76,836
559	Erie					393,700	25,000,000	16,000,000	6,131	8,321	0	696	26	10,681	28	300	10,412
560	Greenville	(30,000)				287,000	1,500,000	1,000,000	811	77,457	0	273	0	83,856	3,795	24,407	112,053
561	Harrisburg	(539,364)				359,325	18,068,370	6,022,790	6,126	18,777	0	51		20,557	3,386	7,600	25,943
562	Hazleton	15,000	40,000	6,000	1,000	62,000	4,000,000	898,748	1,734	18,771				10,632	199	7,000	17,231
563	Honesdale	15,000	15,000	3,000	8,000	36,000	3,500,000	660,000	381	8,971		450		19,147	1,813		20,960
564	Johnstown					120,000			2,147	17,000							

b Deficit, \$1,380.

a Items reported amount to \$47,699.

* Statistics of 1896-97.

TABLE 22. — Statistics for 1887-88 of Property and Receipts of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Estimated Actual Value of Public Property Used for School Purposes.					Total Taxable Property of City or Town.		Receipts.						Balance on Hand from Last School Year.	Received from Loans and Sale of Bonds.	Total Amount of Funds Available During the Year.
	Grounds or Sites.	Buildings.	Furniture.	Apparatus and Libraries.	Total.	Estimated Cash Value.	Assessed Value.	From State Apportionment or Taxes.	From City Apportionments or Taxes.	From County and Other Taxes.	From Tuition Fees.	From all Other Sources.	Total Receipts During Year.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
PENNSYLVANIA—continued.																
Lancaster.....	\$65	\$20,000	\$33,500	\$2,000	\$94,500	\$3,000,000	\$13,000,000	\$6,539	\$39,907	\$3,030	\$255	\$318	\$50,049	\$4,138	\$13,623	\$67,810
Lebanon.....	566						2,000,000	2,306	21,673	0	98	12	24,089	3,113	0	27,202
Lewisport.....	567						1,500,000	1,085	18,000	0	400	0	20,700	0	0	20,700
Lock Haven.....	568						1,500,000	2,300	28,077	37	269	36	33,514	2,978	16,000	33,724
McKeesport.....	569						5,500,000	2,153	28,077	37	269	6	19,109	2,978	16,000	33,724
Mahanoy.....	570						1,521,775	2,181	28,077	37	269	0	19,109	2,978	16,000	33,724
Meadville.....	571						2,000,000	2,181	28,077	37	269	0	19,109	2,978	16,000	33,724
Milton.....	572						333,000	751	2,510	0	1,005	0	7,091	1,878	0	7,091
Monaca.....	573						906,801	1,963	17,289	0	227	207	11,262	0	1,000	12,262
Monticello.....	574						910,000	1,963	17,289	0	227	207	11,262	0	1,000	12,262
Nanticoke.....	575						3,150,000	2,931	21,000	0	400	32	23,451	60	20,000	43,451
New Brighton.....	576						7,450,160	3,379	33,680	0	1,521	32	43,615	2,145	0	45,760
New Castle.....	577						6,400,000	520	4,495	0	0	1,987	32,326	510	0	5,525
Norristown.....	578						1,600,000	520	4,495	0	0	1,987	32,326	510	0	5,525
Oil City.....	579						634,906,105	520	4,495	0	0	1,987	32,326	510	0	5,525
Olyphant.....	580						628,679,312	520	4,495	0	0	1,987	32,326	510	0	5,525
Philadelphia.....	581						3,002,213	1,652	15,683	0	451	27	17,716	924	18,740	18,740
Pennsylville.....	582						150,000,000	31,579	589,760	0	451	27	17,716	924	18,740	18,740
Pittsburgh.....	583						719,613	1,712	12,500	111	132	4,866	19,321	1,861	0	21,182
Pittsboro.....	584						627,592	1,662	10,500	0	12	0	12,324	0	0	12,324
Pottstown.....	585						2,683,759	1,563	15,419			299	17,281	5,768	8,000	31,049
Reading.....	586						10,414	102,612	15,419			371	113,397	13,521	13,000	139,918
Scranton.....	587						27,000,000	9,524	179,235			162	18,709	12,855	42,526	263,011
Shenandoah.....	588						12,000,000	650	5,000	0	50	0	5,700	0	0	5,700
Shenandoah.....	589						1,750,000	650	5,000	0	50	0	5,700	0	0	5,700
South Bethlehem.....	590						1,762,301	2,702	27,386			442	30,772	35	0	30,807
South Easton.....	591						8,470,000	1,261	11,392	191	40	19	12,903	1,483	500	14,891
Susquehanna.....	592						1,900,000	729	13,871	4,326	55	15	5,125	7,080	7,080	12,970

	Tanasqua.....	6,000	38,000	2,400	300	45,700	3,000,000	1,160,790	1,351	7,540	0	6	0	8,897	2,602	0	10,899
592	Thienville.....	4,000	28,000	1,200	150	64,275	4,000,000	440,000	1,904	26,726	0	0	3,018	31,618	940	0	32,558
593	Warren.....	10,000	(42,000)	5,000	1,000	50,310	1,991,504	1,493,628	862	10,356	0	110	6	6,816	0	0	6,816
594	Washington.....	10,000	(82,000)	5,000	3,000	43,000	8,500,000	6,081,035	1,066	14,356	0	464	31	11,416	877	0	12,293
595	West Chester.....	56,000	(252,672)	10,500	3,000	100,000	32,000,000	4,000,000	1,564	73,655	746	16	3,527	26,053	1,675	11,700	39,423
596	Wilkes Barre.....	4,300	118,000	10,500	3,500	255,672	14,000,000	6,916,814	5,961	73,655	0	570	3,704	84,056	5,092	455	90,248
597	Williamsport.....	6,000	118,000	10,500	3,500	255,672	14,000,000	6,916,814	5,961	73,655	0	218	72,256	77,616	14,611	92,227	92,227
600	York.....	4,300	118,000	10,500	3,500	128,800	11,500,000	7,702,742	4,085	42,710	0	225	38	47,058	281	3,300	50,639
RHODE ISLAND.																	
602	Bristol.....	10,000	25,300	1,000	500	65,000	8,500,000	5,609,400	3,096	8,875	0	80	1,743	13,794	0	0	13,794
603	Burrillville.....	10,000	25,300	1,000	500	23,668	7,000,000	7,415,669	12,773	7,692	0	63	3	20,531	287	15,900	8,662
604	Central Falls.....	10,000	25,300	1,000	500	76,500	7,000,000	6,543,919	3,036	5,400	0	35	0	5,222	1,168	123	36,718
605	Cranston.....	15,000	60,000	3,000	1,500	45,600	7,000,000	6,543,919	3,852	8,500	0	377	0	15,522	1,115	0	10,565
606	Cumberland.....	15,000	60,000	3,000	1,500	79,000	6,000,000	6,484,599	3,386	15,000	0	23	0	19,414	2,493	0	15,637
607	East Providence.....	35,258	101,300	(21,270)	1,000	35,000	6,500,000	5,128,200	3,384	6,000	0	0	3,700	14,342	216	377	21,909
608	Johnston.....	35,258	101,300	(21,270)	1,000	157,828	28,800,965	23,604,965	7,835	106,597	0	681	4,887	58,238	17,183	0	14,965
609	Newport.....	35,258	101,300	(21,270)	1,000	552,187	131,021,720	29,440	220,774	220,774	3,959	295	417	369,133	19,682	0	75,421
610	Pawtucket.....	2,500	20,000	5,000	5,000	32,500	7,000,000	5,723,420	3,847	220,774	0	4163	96,698	10,378	1,047	0	138,405
611	Providence.....	10,000	65,000	7,200	2,500	84,700	5,008,905	5,008,905	3,309	16,337	0	1,100	2,219	21,108	436	9,700	31,244
612	South Kingstown.....	10,000	65,000	7,200	2,500	160,000	12,000,000	7,859,500	6,813	26,700	0	455	1,561	35,529	0	0	35,529
613	Westerly.....																
614	Woonsocket.....																
SOUTH CAROLINA.																	
615	Charleston.....	10,000	100,000	10,000	800	120,800	35,000,000	21,512,202	0	26,829	52,969	0	0	79,798	7,775	0	87,573
616	Columbia.....	13,000	17,500	2,893	650	34,043	3,900,000	3,900,000		1,878	2,488		850	5,216	0	18,000	23,216
617	Greenville.....	(25,576)		730		26,250	5,003,000										
TENNESSEE.																	
618	Chattanooga.....	(137,500)		(8,000)		145,500		12,105,640	21,981	49,290	(c)	728	2	72,001	461	0	72,462
619	Clarksville.....	3,000	15,000	1,954		19,954		2,935,818		5,131	6,488	273	0	11,892	378	0	12,270
620	Jackson.....	(9,500)		1,550	510	11,560				5,554	945		5,383	11,892			
621	Knoxville.....	27,000	65,000	7,000	800	99,800	7,845,916	5,897,278	8,028	15,000	8,628	2,100		31,356	23		31,379
622	Memphis.....	60,550	106,423			168,973		25,098,025	63,721	43,846	(c)	1,747		79,314	40		79,314
623	Union City.....	1,500	14,000	1,000	200	16,700	1,500,000	1,000,000	2,685	1,800		66	802	5,353	10		5,353
TEXAS.																	
624	Austin.....	24,500	26,750	8,000	b-d	69,750	12,000,000	8,004,406	17,852	26,584	422	280	83	45,191	1,527	13,300	60,018
625	Brownsville.....	4,000	16,100	1,000	400	22,100	2,500,000	1,874,781	5,463	6,422	200	570	0	12,655	618	0	13,303
626	Brewster.....	e3,000	e15,000	1,200	500	19,700	1,410,000	7,553	1,310					8,893	10,513		19,406
627	Denison.....	(73,000)		3,000	500	76,500	4,614,532	2,37,266	6,948	18,655	386	60	900	46,949		20,000	46,949
628	El Paso.....	7,500	20,000	2,500	500	30,500	5,500,000	5,500,000	3,067	19,552		168	776	23,563	1,789		25,352
629	Fort Worth.....					50,675		6,554,266	14,287	16,463	48	0	0	30,798	9,889	0	40,687

e Rented from private parties.

c Receipts for county taxes are included in Column 9.

d Deficit \$24.

* Statistics of 1870-71.

b This does not include \$160,833 expended for sites and buildings, nor \$18,600 expended for supervision.

c Deficiency, \$14.

TABLE 22.—Statistics for 1887-88 of Property and Receipts of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Estimated Actual Value of Public Property Used for School Purposes.					Total Taxable Property of City or Town.		Receipts.						Balance on Hand from Last School Year.	Received from Loans and Sale of Bonds.	Total Amount of Funds Available During the Year.
	Grounds or Sites.	Buildings.	Furniture.	Apparatus and Libraries.	Total.	Estimated Cash Value.	Assessed Valuation.	From State Apportionment or Taxes.	From City Apportionments or Taxes.	From County and Other Taxes.	From Tuition Fees.	From all Other Sources.	Total Receipts During Year, Including Money Borrowed.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
TEXAS—continued.																
630 Galveston.....	\$68,100	\$205,000	\$22,718	\$3,000	\$298,818	.....	\$20,338,600	\$53,886	\$10,258	0	0	\$324	\$97,418	\$5,162	0	\$97,418
631 Houston.....	10,000	60,000	8,000	1,200	79,200	\$15,000,000	10,000,000	17,219	21,500	0	\$100	233	39,052	0	0	44,214
632 Palestine.....	5,000	7,100	1,600	300	14,000	.....	1,479,155	3,903	3,209	\$299	414	0	7,825	1,783	0	9,608
633 Paris.....	7,000	55,000	5,500	500	68,000	4,500,000	4,500,000	12,220	9,322	450	.....	.....	21,992	.....	.....	21,992
634 Sherman.....	2,020	59,500	(6,600)	.....	86,300	.....	3,003,000	6,579	21,113	.....	374	779	41,065	0	\$236	41,901
UTAH.																
636 Ogden.....	12,000	38,678	4,782	500	55,900	5,000,000	3,000,000	3,074	5,750	0	3,392	84	12,330	791	4,800	17,801
637 Provo City.....	2,935	32,145	1,732	419	37,231	.....	.....	2,244	6,062	.....	1,671	20	.....	.....	.....	10,195
VERMONT.																
638 Bennington.....	(60,000)	.....	.....	1,200	61,200	390,097	390,097	1,899	9,278	.....	659	10,320	22,166	1,375	.....	23,541
639 Brattleborough.....	(87,200)	.....	.....	500	46,000	.....	4,375,330	.....	14,550	.....	300	5,191	19,744	.....	.....	.....
640 Rockingham.....	7,000	35,500	2,000	.....	.....	.....	.....	.....	17,740	.....	.....	2,045	15,514	2,827	8,569	30,711
641 Rutland.....	(50,700)	.....	500	100	51,300	3,500,000	3,500,000	4,633	13,248	0	14	0	17,895	3,263	0	21,158
642 St. Johnsbury.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
VIRGINIA.																
643 Alexandria.....	8,500	21,500	1,000	100	26,100	5,000,000	4,500,000	6,830	9,000	0	0	159	15,989	6,378	0	22,367
644 Fredericksburg.....	22,000	48,000	5,000	500	75,500	.....	1,516,145	2,316	2,500	0	627	35	3,613	1,647	0	7,090
645 Lynchburg.....	23,750	47,500	2,000	600	75,850	.....	9,983,662	8,792	26,498	0	1,151	.....	36,476	.....	0	36,567
646 Norfolk.....	4,500	64,000	3,800	300	72,600	28,436,824	14,756,948	9,489	13,396	0	.....	.....	23,285	134	.....	23,419
647 Petersburg.....	50,000	393,393	15,000	1,000	459,393	10,000,000	9,500,000	9,753	13,639	0	379	0	28,776	50	0	28,826
648 Richmond.....	4,000	23,000	2,100	100	29,200	.....	43,000,000	629,895	103,957	0	1,803	0	135,655	880	0	136,535
649 Staunton.....	2,000	12,000	1,500	500	16,000	2,611,685	2,406,253	2,565	6,500	0	428	11	9,493	45	0	10,373
650 Winchester.....	2,411,685	2,803	3,000	0	318	6,131	38	0	6,177

CITY COMMON SCHOOL STATISTICS.

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[illegible]

6 The items here given are not strictly accurate on account of the existence, in the printed report from which they are taken, of a number of errors, presumably typographical.

Statistics of 1886-87.
Includes \$1,040 for superintendent.

TABLE 23. — Statistics for 1887-88 of Expenditures of Public School Systems of Cities and Towns containing over 4,000 Inhabitants.

Expenditures of School Moneys.																		
City or Town.	Permanent.				Tuition.				Incidental.						Total Expenditure for	Paid on Bonds or Indebted-	Amount Carried Forward to	
	Sites and Build- ings.	Furniture.	Libraries and Apparatus.	Permanent Re- pairs.	Total Permanent.	Salaries of Super- intendents, etc.	Salaries of Teach- ers.	Total Tuition.	Officers of School Boards, Clerks, Messengers, Janitors, etc.	Fuel and Lights.	School Books Supplied for Use of Pupils.	Interest on In- debtedness.	All Other Current Expenses.	Total Incidental.				
ALABAMA.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Birmingham.....	\$32,037	\$703	\$50	\$900	\$33,690	\$2,000	\$21,152	\$23,152	\$1,035	\$509			\$3,000	\$1,500	\$6,044	\$62,886		\$14,959
Bufala.....	0	0	0	0	0	50	1,129	1,179	10	25					71	2,171		
Lively.....	1,100				1,100	0	1,000	1,000										
Mobile.....	2,000	150	75	130	2,355	2,000	17,600	19,600	440	210					650	22,605		343
Montgomery.....	0	0	0	0	0	25	8,920	8,945	0	0					332	9,277		1,388
Selma.....	12,000	1,000	150	1,200	14,350	1,200	2,650	3,250	165	105			840	50	1,100	18,700		0
Talladega.....	18,634	346		100	19,080	1,500	4,123	5,623	240	99				535	874	25,587		16
Tuscaloosa.....																		
ARIZONA.	9			59			(8,762)	8,762						2,374		11,106		
Tucson.....																		
ARKANSAS.	10																	
Fort Smith *.....	38,740				100	37,840	1,800	11,190	1,085	283					1,373	52,203		79
Helena.....	0	224	0	0	0	224	0	4,935	700	330				0	1,630	6,249		353
Hot Springs *.....								10,530								14,796		
Little Rock.....							2,100	29,450	9,235	0				0	9,235	40,796		30,114
Little Rock.....	0	0	0	0			2,100	9,000	600	300				0	900	11,250		
Pine Bluff.....							1,350	10,350	220	100						11,620		80
Texarkana.....	3,000	500	100	50	3,650	1,000	6,400	7,400					200	50	570			
CALIFORNIA.	11																	
Los Angeles.....	25,209	7,530	445	622,172	55,356	3,150	101,929	105,079	675	130						130,435		13,470
Marysville.....	2,134	5	5	1,030	3,169	600	7,754	8,334						819	1,664	13,187		21,320

18	Oakland*	13,763	2,084	363	1,963	18,163	2,400	143,075	145,475	11,085	1,055	139	.....	11,111	24,022	187,660	.....	3,160
19	Sacramento	176	144	0	3,218	3,533	2,700	63,070	65,770	5,928	2,175	.....	.....	4,862	12,965	82,273	.....	.....
20	San Francisco	39,825	0	1,271	47,119	94,486	47,000	741,951	748,951	60,496	7,926	.....	.....	19,263	87,625	931,962	.....	73,309
21	San Jose	0	166	1,182	3,086	3,434	1,500	38,866	40,366	5,127	723	2,136	0	4,369	12,355	56,755	0	19,761
22	Santa Cruz	6,000	281	42	(a)	3,223	1,500	12,736	14,236	900	0	0	0	1,085	1,985	22,514	0	439
23	Santa Rosa	2,800	500	0	1,771	3,071	1,695	12,857	12,857	1,320	532	.....	.....	1,085	3,753	21,681	.....	2,730
24	Vallejo	3,997	115	35	.....	150	1,695	14,310	16,065	1,320	532	.....	.....	50	1,852	18,907	.....	4,644
25	Woodland	.....	.....	.....	.....	3,997	0	9,315	9,315	.....	.....	.....	.....	.....	1,803	15,115	.....	2,223
COLORADO.																		
26	Aspen	.....	802	.....	.....	802	0	7,182	7,182	2,200	1,225	.....	.....	1,200	7,823	15,807	.....	3,063
27	Leadville	.....	.....	400	100	500	2,000	11,316	13,316	2,200	1,225	.....	6,400	1,200	11,025	24,811	.....	.....
28	Pueblo	.....	.....	.....	.....	.....	2,000	14,411	16,411	.....	4,935	.....	7,863	4,436	17,234	33,645	7,068	6,051
CONNECTICUT.																		
29	Bridgport*	3,057	1,386	489	4,080	9,012	2,500	65,632	68,132	4,545	3,453	99	.....	1,204	9,391	87,535	.....	4,290
30	Bristol	.....	.....	434	1,658	2,062	430	14,730	15,180	262	1,225	.....	.....	2,717	4,204	21,476	.....	.....
31	Derby	.....	.....	331	1,903	2,229	100	29,337	29,437	350	5,071	.....	.....	3,749	9,420	41,216	.....	3,377
32	East Hartford	877	75	36	721	1,709	140	6,614	6,754	350	900	75	0	263	1,195	9,653	960	407
33	Greenfield*	0	100	20	1,572	1,652	300	11,163	11,463	365	1,500	.....	.....	574	2,439	13,534	1,950	179
34	Hamden	.....	.....	.....	.....	.....	651	11,719	12,370	317	1,000	772	.....	.....	1,119	13,489	.....	.....
35	Hartford	.....	.....	2,363	14,053	16,416	1,000	122,175	123,175	.....	416,601	.....	.....	28,069	44,700	184,291	.....	.....
36	Killingly	.....	.....	.....	.....	.....	249	10,428	10,677	999	1,303	0	0	467	2,679	15,456	0	.....
37	Manchester	0	0	211	1,889	2,100	825	41,874	42,704	600	3,403	.....	.....	.....	4,003	51,248	.....	0
38	Meriden	0	200	20	300	520	2,100	11,085	13,185	1,243	207	243	.....	.....	25,602	24,175	.....	2,921
39	Middletown	.....	.....	.....	.....	.....	350	8,947	9,297	.....	662	836	.....	3,380	.....	14,175	.....	.....
40	Naugatuck	.....	.....	.....	.....	.....	.....	21,680	.....	.....	.....	.....	.....	2,525	41,396	31,530	.....	.....
41	New Britain	.....	.....	220	2,538	.....	3,000	182,453	185,453	16,762	8,543	421	4,609	14,061	2,850	281,451	70,000	19,076
42	New Haven	39,039	597	1,493	10,416	51,005	500	19,527	20,000	1,600	950	.....	300	.....	2,850	30,870	0	.....
43	New London	2,500	300	220	5,000	8,020	500	6,327	6,461	120	612	5	.....	.....	767	37,228	0	93
44	New Milford	2,500	100	50	100	750	134	19,860	19,860	1,400	1,687	436	1,400	879	5,862	27,046	3,000	1,324
45	Norwich	.....	.....	350	1,034	1,384	153	6,559	6,712	0	617	0	.....	0	617	7,329	0	.....
46	Plainfield	0	0	0	.....	.....	.....	8,850	8,850	.....	1,106	.....	.....	639	1,316	11,722	.....	.....
47	Portland*	.....	.....	43	1,084	5,049	142	6,707	6,909	.....	.....	.....	.....	.....	.....	.....	.....	.....
48	Punahou	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
49	Rockville	4,891	.....	30	362	.....	0	6,227	6,227	.....	.....	.....	.....	2,074	.....	13,551	8,000	0
50	Stafford	123,000	43,000	430	1,566	1,696	200	23,565	23,565	500	3,632	0	.....	0	3,747	.....	.....	.....
51	Stamford*	.....	.....	130	1,566	.....	140	10,128	10,268	700	540	.....	2,089	418	3,747	.....	112	0
52	Stratford	.....	.....	100	1,500	2,100	150	5,616	5,756	432	364	50	0	1,159	2,005	9,851	0	0
53	Thomaston	0	500	.....	.....	.....	.....	5,416	5,566	.....	.....	.....	.....	523	.....	6,289	.....	.....
54	Thompson*	.....	.....	65	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

* Statistics of 1886-87.

a Includes repairs, fuel, and contingent expenses.

b Includes also expenditures for text-books.

c Salary of superintendent (\$600) paid from general fund of city.

d Paid from general fund of the city.

e Includes \$2,400 paid from the general fund of the city to the secretary of the board of education.

f \$5,000 transferred to "revolving fund."

g Included in current expenses.

h Includes rent and insurance.

i Includes "incidentals."

j Does not include permanent expenditures.

k Not paid from school fund.

TABLE 23.—Statistics for 1887-88 of Expenditures of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

Expenditures of School Money.																		
City or Town.	Permanent.					Tuition.				Incidental.						Paid on Bonded Indebtedness.	17	18
	Sites and Buildings.	Furniture.	Libraries and Apparatus.	Permanent Repairs.	Total Permanent.	Salaries of Superintendents, etc.	Salaries of Teachers.	Total Tuition.	Officers of School Boards, Clerks, Messengers, Janitors, etc.	Fuel and Lights.	School Books Supplied for Use of Pupils.	Interest on Indebtedness.	All other Current Expenses.	Total Incidental.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
CONNECTICUT—continued.																		
55 Torrington		(\$4,200)	\$265	\$923	\$5,285	\$240	\$9,367	\$9,567	\$608	\$1,864				\$2,472	\$17,424		0	
56 Wallingford	\$13,434	\$832		3,602	17,863	1,557	8,782	10,289	882	455	\$398	\$1,996		3,675			\$1,945	
DAKOTA.																		
57 Fargo	3,500	150	60	700	4,410	1,800	14,960		2,150	2,415		2,600	\$200			0	17,283	
58 Sioux Falls	2,500					1,338	10,198	11,536									12,901	
DELAWARE.																		
59 New Castle		141		118	259		4,882	4,882	305	292	598		115	1,330	6,471		144	
60 Wilmington	13,920	861	0	3,331	18,112	1,600	71,951	73,551	4,760	3,778	4,878		3,253	16,669	108,332		21,382	
DISTRICT OF COLUMBIA.																		
61 Washington		(239,116)	(a)			7,450	437,036	445,136						115,980	880,232	0	0	
FLORIDA.																		
62 Gainesville	0	300	0	190	400		3,180	3,180	353	75	0	0	0	423	3,453	0	200	
63 Key West	0	0					2,880	3,830	500	60	0	0	25	0	3,705		3,830	
64 Palatka						950	6,743	7,193	0	153	0	0	0				3,830	
65 Pensacola	3,791	123	0	180	4,066	450			356				600	1,109	12,368		1,238	

GEORGIA.		881	436	28	881	1,250	6,465	7,715	135	329	0	0	373	847	9,443	871
66	Americus.....	2,109			2,573	1,300	8,459	9,359	1,000	327	0	0	396	923	13,455	0
67	Atlanta.....	8,060	250	1,009	10,259	2,000	18,000	20,000	1,000	1,200	100	1,000	10,000	13,300	43,550	6,873
68	Augusta.....	(221)			321	1,000	13,815	15,415	508	324	824		556	17,480	1,089	1,260
69	Columbus.....	100	150	100	350	1,450	16,700	16,700	508	583			323	1,489	18,539	
70	Macon.....	1,846	786		2,870	1,450	5,266	6,716		596			393	9,979	8,552	333
71	Rome.....	7,505	500	1,554	9,859	3,000	49,209	52,209	2,355				8,552	11,503	73,571	8,500
72	Savannah.....															
73																
ILLINOIS.		1,506	161	1,615	3,303	2,000	23,813	25,813	2,340	1,304	1,017	1,884	1,165	7,710	36,823	15,973
74	Aurora.....	5,272	245	379	6,110	1,200	4,310	6,010	660	323	25	1,080	710	2,793	14,918	2,414
75	Beardstown.....	21,639	514	1,200	23,848	2,000	25,405	27,405	2,880	644	324	2,898	1,520	8,206	59,519	1,064
76	Belvidere.....															
77	Bloomington.....	11,667	752	533	13,092	1,732	36,655	38,447	3,440	4,322		3,009	4,491	15,272	65,721	7,283
78	Calumet.....	9,000	124	1,383	11,712	1,300	7,165	8,465	740	1,034				2,798	11,961	3,454
79	Carroll.....	1,700	100	1,350	12,150	1,500	8,675	10,175	1,273	270	150	1,120	379	2,852	3,403	707
80	Centralia.....	60		837	897	1,010	6,489	7,499	822	223	31	1,337	270	435,471	1,922,845	15,060
81	Chicago.....	190,312	27,184	38,077	222,537	20,350	1,234,487	1,254,337	127,944	64,473	3,632	69,240	3,938	6,218	26,187	28,066
82	Duquoin.....			1,521	1,521	1,700	22,243	24,043	2,775	1,223	69	819	2,170	6,522	50,964	3,000
83	East St. Louis.....	10,080	863	3,369	20,267	2,000	22,175	24,175	4,325	1,093	87		3,257	10,613	68,773	20,213
84	East St. Louis.....	9,922	(1,336)	3,334	14,362	1,500	42,268	43,768	6,382	907		60	50	660	5,430	1,000
85	Elgin.....			654	60	1,700	4,000	4,720	150	100						
86	Elgin.....	113														
87	Elgin.....	2,371	453		2,824	2,000	11,931	13,931	1,490	1,548	20	1,256	602	4,916	21,671	5,000
88	Evansville.....	700	107	923	2,065	1,800	15,834	17,634	2,010	1,912		1,292	994	6,238	25,957	2,823
89	Freeport.....		320			1,200	7,520	8,720	1,882	650			256	2,798	13,583	3,000
90	Galesburg.....	569	200	1,265	2,065	1,700	18,512	20,212	2,061	1,092	598		459	4,180	47,017	17,651
91	Galesburg.....	21,722		1,873	22,595	1,800	16,853	17,653	1,541	988	25		845	3,303	24,950	12,462
92	Greenwood.....	1,874	400	2,317	4,091	1,800	4,440	6,240	50	375			75	500	7,180	3,401
93	Jerseyville.....	50	200	11,800	250	1,600	24,811	26,411	300	9,009		1,500				
94	Joliet.....	20,000				1,200	8,265	9,465	1,732	542		1,394	618	4,306	22,538	6,000
95	Kankakee.....	7,512	525	1,000	1,060	1,200	9,225	10,025	1,075	542	0	1,300	653	2,915	13,940	5,010
96	Kankakee.....	0	0			1,200	9,118	10,318	1,336	563			371	2,470	13,962	8,488
97	La Salle.....	1,224	250	1,224	2,474	1,200	4,860	5,760	735	499			385	2,283	11,983	700
98	Litchfield.....	229	187	3,275	3,275	1,200	4,622	5,822	395	413	13		679	8,783	58,030	3,000
99	Mendota.....	2,042	193	3,104	27,788	1,800	19,659	21,459	2,579	1,221	289	880	3,841	4,402	51,840	22,781
100	Moline.....	23,548	907	2,063	26,515	1,800	10,452	10,452	1,701	261		2,500		8,922	8,087	2,613
101	Monmouth.....	34,853	2,063			950	5,355	6,305	683	200		34		4,406	25,608	15,075
102	Olney.....	0	221	589	810	1,350	16,505	17,855	1,090	1,696						
103	Ottawa.....	2,000	100	600	3,200	1,800	61,758	64,258	1,090							
104	Paris.....					2,500	8,585	9,585	972	330						
105	Peoria.....	606	150	25	700	1,481	1,800	12,036	1,635	422			996	2,263	13,634	3,709
106	Peoria.....		216	53		1,800	12,036	14,136	1,635				901	11,165	23,917	350
107	Pullman.....	4,573		643	5,216	1,500	31,789	33,289	6,061		49	391	5,863	12,306	50,871	3,721
108	Quincy.....		300	1,668	18,122	4,500	20,939	23,439	3,330	533		2,136	7,742	14,166	57,727	5,400
109	Rock Island.....	15,512	612	1,668	18,122	2,000	36,375	38,375	7,290	858	378			9,624	64,273	4,552
110	Rockford.....	11,937	749	3,882	16,827	2,000	36,375	38,375	7,290	858	378			9,624	64,273	4,552

* Statistics of 1898-99.

a Expenditures for libraries and apparatus included in Column 15.

b Includes total expenditure for evening schools, \$25,731.

c Part of city.

d Supplied by parents.

e Pay of janitors included in Column 11.

TABLE 23.—Statistics for 1887-88 of Expenditures of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

Expenditures of School Moneys.																		
City or Town.	Permanent.				Tuition.				Incidental.							Total Expenditure for Schools.	Paid on Bonded Indebtedness.	Amount Carried Forward to Next Year.
	Sites and Buildings.	Furniture.	Libraries and Apparatus.	Permanent Repairs.	Total Permanent.	Salaries of Superintendents, etc.	Salaries of Teachers.	Total Tuition.	Officers of School Boards, Clerks, Messengers, Janitors, etc.	Fuel and Lights.	School Books Supplied for Use of Pupils.	Interest on Indebtedness.	All Other Current Expenses.	Total Incidental.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
ILLINOIS—cont'd.																		
111	\$3,900			\$4,202	\$14,113	\$1,800	\$39,422	\$41,222	\$1,062	\$1,361	\$25	\$1,186	\$2,600	\$9,324	\$64,659		\$5,121	
112						1,500	5,814	7,314	600	454		396			9,701	\$500	4,027	
113	3,331	\$489		2,023	5,853	1,300	11,810	13,110	1,599	506			464	2,569	21,532	2,000	7,793	
114						100	9,190	9,290	1,200	1,000	50			2,250	12,000			
INDIANA.																		
115						1,125	6,210	7,335	510	150					10,305		12,446	
116		110	\$100	1,100	1,310	1,455	10,206	11,691	1,295	590	50		2,275	4,210	17,211			
117	5,265		125		5,389	1,600	19,251	20,851	225	1,300	250		107	1,882	28,123		7,565	
118						3,300	77,457	81,257	7,805	1,337			14,121	21,926	103,183		36,283	
119	2,011	1,224	698	1,673	5,606	2,500	62,561	65,061	6,453	1,387			1,974	9,764	80,431		102,095	
120						1,450	11,296	12,746	850	600		300	2,437	4,187	17,653	720	8,910	
121				50	550	1,500	9,090	10,590	1,062				5,200	6,262	17,402			
122			500			3,600	103,690	177,740	13,425	6,935	2,299	12,337	12,502	47,153	233,217	250,216	60	
123		313	14,006			1,300	16,960	18,260	1,475	586		1,019	1,065	4,145	22,808	1,100	6,759	
124		70	30	303		1,400	8,615	10,015	751	311			666	1,668	23,950	1,100	2,467	
125	11,478	241	305	242	12,267	1,400	(15,450)	15,490	1,150	1,050	105			18,955				
126		250	700	250	1,200													
127						1,860	15,162	17,022	1,619	1,197	9		817	3,642	11,000	1,200	1,200	
128															20,664	3,684	10,756	
129															15,917			
130																		
131						1,700	10,155	11,855	1,570									
132															40,411		27,857	

133	Peru.....	300	25	300	625	1,640	8,650	10,290	1,040	650	74	2,400	2,438	10,084	12,605	5,000	12,847
134	Richmond.....	984	167	1,140	2,641	5,400	27,558	32,558	3,458	1,714					45,683	5,000	42,425
135	Seymour.....					1,250	6,617	7,867	918	409							
136	Shelbyville.....					(8,133)		8,133	1,998	2,011				3,528	11,661	4,767	
137	South Bond.....					1,800	21,358	23,158	5,595	1,739			2,023	6,032	34,753	5,000	24,904
138	Terre Haute.....			4,319	5,568	2,500	61,210	63,710	5,565	300	100	0	2,951	10,385	82,602	0	15,370
139	Union City.....			2,273	8,507	1,200	4,365	5,565	525	739							
140	Valparaiso.....																
141	Vincennes.....	18	29		47	1,700	10,558	12,258	1,148	306			798	2,252	14,557	17,784	
142	Washington.....	159	23	340	816	1,000	6,672	7,672	747	280	5		678	1,710	10,198		3,183
IOWA.																	
143	Atlantic.....	500	100	700	1,360	1,200	8,623	9,823	1,160	588		1,650		3,398	14,521	2,500	7,528
144	Boone.....	200	300	1,000	1,500	1,500	10,500	10,500	1,000	600	40			2,140	14,140		
145	Burlington*.....	1,686	159	2,217	8,878	1,900	43,824	45,724	4,601	1,468	49			2,140	52,591		2,339
146	Council Bluffs.....	100	25	3,358	4,899	2,000	30,019	32,019	4,561	2,223		3,465	11,771	22,028	58,946	2,500	29,189
147	Davenport.....				2,000	1,300	12,700	14,000	2,500	600		1,700			25,800		
148	Davenport, East.....	414	220	418	2,216	2,000	59,343	61,343	5,200	1,768	98	62	3,665	11,313	74,872		22,821
149	Des Moines, East.....	7,596	300	2,925	21,702	1,600	30,648	32,648	4,395	1,615	600	3,885	1,826	12,321	69,271		13,616
150	Des Moines, West.....	20,971	849	5,528	28,288	2,000	55,015	57,015	6,107	2,678	399	5,296	8,963	23,383	108,686	10,000	46,889
151	Dubuque.....	518	198	4,078	6,974	0	41,899	41,899	5,810	3,635			1,730	11,165	60,038	1,907	9,904
152	Fort Dodge.....	202	210	507	3,609	1,500	8,140	9,640	1,100	571		1,250	210	3,131	16,381	2,000	9,904
153	Iowa City*.....			1,913		1,300	14,796	16,096	1,993	1,111			693	3,759	21,808	6,945	1,428
154	Keokuk.....						26,918										
155	Lyons.....	200	100	400			7,733	7,733	810	300		480					1,722
156	Marshalltown.....				45	1,800	20,602	22,402	3,011	1,493		3,308	3,090	10,932	33,379		11,458
157	Mount Pleasant.....														10,920		1,227
158	Muscatine.....	1,143			1,143	1,500	21,251	22,751	1,871	1,010		483	478	3,812	27,746	4,000	1,195
159	Oskaloosa.....			550	1,900	1,400	18,353	19,753	2,040	415	225	850	678	4,208	25,861		
160	Ottumwa.....			600	5,300	1,800	18,576	20,376	2,600	800	75	2,800		6,275	32,251		4,769
161	Sioux City*.....	3,500	300	4,000	47,800		26,000	26,000	3,435	4,000	100		5,500	13,635	90,000		
162	Waterloo, East.....																
163	Side.....		31	61,622	1,653	1,650	6,783	8,433	603	(b)	0	925	446	1,974	12,060	0	3,690
164	What Cheer.....	154	100	218	472	1,000	5,400	6,400	675	200			100				
KANSAS.																	
164	Atchison.....					1,500	18,267	19,767	1,984	1,043	10	4,800	3,458		33,330		
165	Atchison.....						6,063										
166	Clay Centre.....	15,354	42		726	1,212	7,617	8,829	1,048	597		2,429	17	2,006	27,404	e47	3,496
167	Emporia.....	684	500	1,500	2,500	1,600	21,000	22,600	2,000	1,100		3,198		9,010	28,200	39	
168	Emporia.....	245	456	546	17,523	1,500	17,011	18,511	2,144	747				9,010	28,402	135	
169	Hutchinson.....				13,060	1,200	8,325	9,525	1,720	437				9,010	28,402	135	
170	Independence.....	500	100	1,300	2,900	1,450	8,200	9,650	800	600	50	1,500	300	3,250	15,800	1,500	900
171	Kansas City*.....	2,952	143		30,525	1,500	24,486	25,986	4,453	1,869				12,183	18,505	82,426	8,841
172	Lawrence.....	143		1,906	2,109	2,400	14,031	15,231	1,653	1,045				18,505	16,241		
173	Leavenworth.....	1,106		9,128	10,234	2,400	34,664	37,064	300	981	456	7,304	3,506	6,294	d23,634	d986	
174	Marysville*.....		42		3,670	1,000	3,335	4,335		758				12,607	59,905	11,138	8,847
175	Newton.....	320	29	65	3,381	1,284	10,215	11,499	1,002	78		2,077	401		8,763	4,000	

d Sinking fund not included.

b Expenditure for fuel included in Column 5.

c Payment of overdraft, account of 1886-87.

* Statistics of 1886-87.

a Overdraft, \$40,056.

MAINE.

194	Auburn.....	797	854	1,459	3,110	300	18,575	1,347	1,655	1,426	108	1,482	4,774	24,415	24,415
195	Augsb.					375	15,205	961	1,374	849		4,753	8,797	23,089	162
196	Bangor.....			1,250	32,401	1,805	1,880	1,805	1,880	359		753	16,890	41,198	0
197	Bath.....			1,011	12,531	1,878	12,531	1,878	1,878	735		4,850	7,625	37,221	0
198	Bridgford.....			1,051	20,345	1,300	21,845	1,100	1,300	200	175	1,550		13,200	0
199	Calais.....			500	9,000	300	9,300		600	50					
200	Deering.....			886	5,554	25	5,579	450	500			671	1,021	8,086	0
201	Eastport.....			940	7,010	200	7,210	491	1,026	250				11,041	0
202	Gardiner.....			258										53,087	0
203	Leaviston.....			92	69,732	2,000	71,732	5,483	9,815	2,543	0	7,263	21,134	117,937	0
204	Lewiston.....			217	3,850	400	4,250	726	570	0		150	1,446	12,668	0
205	Portland.....			540	6,823	1,200	8,023	450	474	1,535					
206	Saco.....			400	9,110	275	9,385	155	474	844					
207	Westville.....			337				2,073						34,077	
208	Westbrook.....			960	22,363										

MARYLAND.

209	Baltimore.....	26,112	11,182		37,294	4,500	562,870	35,999	18,003	40,304		82,574	176,940	781,004	
210	Frederick.....					1,800	7,212	500	350	220	90	200	1,360	8,572	128
211	Hagerstown.....			125	525	0	9,620	50	500	40	0	100	690	10,835	0

MASSACHUSETTS.

212	Adams.....			2,000		1,700	15,700	1,500	1,300	1,525		2,500	6,825	42,535	
213	Amesbury.....					800	7,292	413	559	722		1,079	2,773	14,311	255
214	Andover.....						15,893	1,582	1,582	1,587		4,315	2,773	10,865	342
215	Arlington.....			180	7,655	300	7,708	323	548	611		1,074	2,556	21,930	
216	Attleboro.....			150	1,400	1,000	13,000	1,400	1,200	1,100		1,000	4,700	19,150	5,000
217	Beverly.....			0	16,501	0	16,501	1,769	1,254	1,698	0	918	5,669	25,990	0
218	Bucksport.....			78	7,107	254	7,107	354	687	981	0	229	2,251	11,187	0
219	Boston.....			209,071	61,193,153	25,880	61,220,022	129,675	71,133	33,885	0	98,179	332,822	1,907,537	0
220	Braintree.....			300	8,058	2,000	9,258	788	1,133	805		267	1,920	11,878	634
221	Brookline.....						39,022	3,414	1,040	2,043		2,541	7,898	47,630	1,860
222	Brookline.....						174,379	4,907	3,845	10,932			50,891	46,755	0
223	Cambridge.....			1,430	58,216	3,000	58,216	4,140	3,516	3,983		3,997	15,636	79,221	0
224	Chelsea.....			3,579	18,321	2,400	18,321	1,932	1,357	1,524	0	2,651	7,131	30,113	0
225	Chilmark.....			756	16,750	2,300	19,050	1,800	1,800	1,409		2,952	8,061	27,651	0
226	Clinton.....			0	9,777	0	9,777	135	685	676	400	1,526	3,422	5,000	0
227	Concord.....			195	12,400	600	13,000	1,707	1,773	854		1,225	3,575	16,384	0
228	Danvers.....			21,122	20,908	1,654	22,560	1,707	1,773	854		3,438	7,778	51,460	0
229	Dedham.....				7,195	200	7,395	439	412	1,000		1,193	3,044	10,575	0
230	Dorchester.....						14,544	1,320	1,179	1,336		1,470	5,305	28,002	1,111
231	Easthampton.....														
232	Everett.....			450	8,153										

*Statistics of 1886-87.

a Includes slaves and farmhands.

b Orders outstanding from previous year, and orders issued by South Tropic board before annexation.

c Orders outstanding amount to \$125.

d Includes overdraft of last year.

e Deficit, \$832.

f Includes \$331 appropriated to School for the Deaf.

g Deficit, \$471.

h Does not include salaries of instructors in Horace Mann School and evening schools.

i Pay of janitors included in Column 11.

j Returned to town treasury.

258	Monson.....	168	6,911	357	435	611	165	1,598	3,647	0	1,049
259	Montague.....	674	9,962	1,962	572	590	1,726	4,698	14,074	0	0
260	Nantucket.....	600	4,401	360	133	315	463	1,361	6,362	0	0
261	Needham.....	325	7,019	77,473	432	751	560	2,651	10,667	0	0
262	New Bedford.....	2,358	75,473	9,946	3,814	4,000	3,714	27,474	110,074	0	0
263	Newburyport.....	300	18,025	18,825	6,000	418	3,381	63,170	22,394	0	0
264	Newton.....	2,443	86,079	22,819	7,228	3,827	8,371	13,738	124,718	0	0
265	North Adams.....	2,451	20,669	7,381	1,500	2,006	10,032	13,738	39,000	0	0
266	North Brookfield.....	6,715	7,381	274	1,500	735	475	1,994	9,375	0	0
267	Northampton.....	11	25,336	26,569	1,321	2,318	984	6,045	41,784	0	0
268	Northbridge.....	707	7,893	412	658	631	1,701	10,690	10,690	0	0
269	Peabody.....	707	21,755	21,755	1,407	1,400	3,160	8,057	29,812	0	0
270	Plymouth.....	1,196	28,697	30,197	1,925	1,600	6,446	12,065	43,172	0	0
271	Randolph.....	80	16,468	17,721	991	1,876	1,945	4,722	11,884	0	0
272	Rockland.....	1,000	9,531	523	458	771	409	2,161	12,963	0	0
273	Salem.....	1,000	9,531	523	458	771	409	2,161	12,963	0	0
274	Scituate.....	1,000	9,531	523	458	771	409	2,161	12,963	0	0
275	Southbridge.....	304	2,000	2,000	2,000	2,000	2,000	2,000	2,000	0	0
276	Southfield.....	103	1,400	1,400	1,400	1,400	1,400	1,400	1,400	0	0
277	Stoughton.....	30	1,716	1,716	1,716	1,716	1,716	1,716	1,716	0	0
278	Stoughton.....	300	630	630	630	630	630	630	630	0	0
279	Taunton.....	338	14,948	985	1,228	1,228	1,548	3,741	21,228	0	0
280	Warefield.....	12,965	43,925	3,190	4,345	2,300	1,200	11,035	73,291	0	0
281	Wareham.....	3,500	7,771	8,871	819	590	827	3,612	17,350	0	0
282	Warren.....	1,000	18,954	1,857	1,216	1,645	535	4,905	25,682	0	0
283	Watertown.....	700	5,677	5,902	297	500	2,235	3,636	10,438	0	0
284	Webster.....	480	10,277	10,877	883	805	451	2,746	14,173	0	0
285	West Springfield.....	130	18,942	19,642	1,414	1,558	1,261	8,016	27,738	0	0
286	Westborough.....	200	21,000	24,800	1,800	2,817	2,439	4,996	48,930	0	0
287	Weymouth.....	1,000	21,000	24,800	1,800	2,817	2,439	4,996	48,930	0	0
288	Weymouth.....	1,000	21,000	24,800	1,800	2,817	2,439	4,996	48,930	0	0
289	Winchester.....	2,439	26,066	27,866	2,000	2,089	1,365	7,394	37,039	0	0
290	Woburn.....	324	182,771	186,271	13,705	9,275	16,382	51,432	265,840	0	0
291	Worcester.....	810	12,903	14,603	1,553	1,416	597	3,636	19,408	0	0
292	Worcester.....	713	22,925	24,925	1,567	2,238	3,084	7,434	37,496	0	0
293	Adrian.....	(504)	12,903	14,603	1,553	1,416	597	3,636	19,408	0	0
294	Ann Arbor.....	22,312	2,000	33,673	4,401	2,019	941	2,000	13,994	0	0
295	Bald Creek.....	488	4,629	5,775	150	575	65	800	5,883	0	0
296	Bay City.....	1,000	2,461	3,461	350	225	282	857	5,883	0	0
297	Cadillac.....	300	2,461	3,461	350	225	282	857	5,883	0	0
298	Cheboygan.....	200	2,461	3,461	350	225	282	857	5,883	0	0
299	Chesapeake.....	132,965	242,071	250,371	16,797	1,500	13,684	55,445	507,445	0	0
300	Deloit.....	4,108	2,500	4,729	50,118	1,993	1,427	15,961	84,556	0	0
301	East Saginaw.....	1,181	2,500	4,729	50,118	1,993	1,427	15,961	84,556	0	0
302	Escambia.....	97	2,125	24,333	3,130	2,339	920	3,619	7,990	0	0
303	Flint.....	825	2,125	24,333	3,130	2,339	920	3,619	7,990	0	0

*Statistics of 1886-87.

a Balance transferred to other departments.

b Expenditures for school books included in Column 4.

c Not under control of school committee.

d Covered into town treasury.

e \$23 expended in excess of appropriations.

f Owing to a change in the fiscal year, this statement covers the period between March 13, 1887, and September 1, 1888.

TABLE 23.—Statistics for 1887-88 of Expenditures of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

Expenditures of School Moneys.																		
City or Town.	Permanent.					Tuition.				Incidental.						Total Expenditure for Schools.	Paid on Bonded Indebted- ness.	18
	Sites and Build- ings.	Furniture.	Libraries and Apparatus.	Permanent Re- pairs.	Total Permanent.	Salaries of Super- intendents, etc.	Salaries of Teach- ers.	Total Tuition.	Officers of School Boards, Clerks, Messengers, etc.	Fuel and Lights.	School Books Supplied for Use of Pupils.	Interest on In- debtedness.	All other Current Expenses.	Total Incidental.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
MICHIGAN—con.																		
304 Grand Haven*	\$23,215	\$176	\$178	\$470	\$824	\$1,200	\$7,576	\$8,776	\$13,171	\$7,651	0	\$11,330	\$12,697	\$3,948	\$13,548	\$35,000	\$1,055	
305 Grand Rapids		2,799	7,739	2,180	35,993	2,500	104,940	107,440	1,089	1,585			2,442	44,849	188,282	2,667	9,715	
306 Ionia*		593	52	704		1,500	9,904	11,404	1,380	1,940					15,565	2,000	1,707	
307 Jackson	13,000	470	1,254	1,963	14,318	1,800	20,395	22,195	2,325	1,585		333	4,499	8,742	45,256	2,000	557	
308 Kalamazoo	15,154	102	201	3,546	18,831	2,100	24,323	26,423	3,530	2,508		373	2,316	8,697	53,951	6,000	8,288	
309 Ludington	14,972			1,213	18,823	1,500	11,821	13,321	1,630					2,892	38,705	2,439		
310 Marquette				1,213	1,213	1,800	10,358	12,758						7,601	21,569		859	
311 Marshall		81	375	254	713	1,500	8,228	9,728	668	748	\$104		7,601	7,601	12,790		2,386	
312 Menominee		850	176	1,818	2,844	1,500	10,125	11,625	1,100	900	25	540	862	3,427	17,896	3,000	7,704	
313 Monroe	8,000	500	100	100	8,700	1,500	4,850	6,350	1,313	600		360	530	1,803	20,348	1,000	2,216	
314 Negaunee		1,000	150	2,221	3,222	1,600	7,583	9,183	1,480	(5,963)		500	0	7,943	15,845			
315 Niles				2,600	3,030	1,550	8,165	9,715	1,233	650	25		1,172	3,080	15,441		2,201	
316 Pontiac*	20,000	0	0	1,221	1,221	1,500	9,451	10,951	1,800	1,200			1,199	3,199	15,441		2,201	
317 Port Huron					20,000	1,600	13,216	14,816	2,502	2,000	150	0	1,500	6,152	40,938	0	12,910	
318 Saginaw	20,262	1,675	357		22,284	1,800	21,211	23,011	3,040	2,411		840	3,240	9,531	54,833	5,000	4,000	
319 West Bay City				500	12,410	1,320	14,680	16,000	1,800	3,365	135	650	179	6,129	34,539			
320 Wyandotte	11,000	780	130			1,000	5,400	6,400	1,600	248			728	1,636	8,036		1,222	
321 Ypsilanti					49,500													
MINNESOTA.																		
322 Anoka		938	225	295	1,459		8,544	8,544	911	631		1,209	580	3,331	13,334	9,350	387	
323 Brainerd																		
324 Crookston		3,340	60	1,396	4,796	1,575	5,476	7,051	1,113	883		1,890	335	4,281	16,128		6,891	
325 Duluth	20,404	1,516	378	2,463	24,761	2,500	26,881	29,381	4,534	3,290		6,834	2,636	17,294	71,436		99,384	
326 Faribault*	35,040	600	1,000	3,000	39,600	1,500	8,875	10,375	780	1,300	200		2,000	4,280	54,255	6,000		

327	Mankato*	3,701	24,020	391,036	1,800	9,539	11,339	1,278	619	.....	5,212	13,772	3,502	737,058	295,000	11,528
328	Minneapolis	16,749	346,566	.....	12,886	259,814	272,750	24,312	25,000	.....	870	13,772	3,502	737,058	295,000	26,815
329	Red Wing	84	.....	1,708	1,500	12,632	14,282	1,365	816	0	.....	905	4,046	20,035	3,040	992
330	St. Cloud	200	3,000	20,250	1,200	7,429	8,620	785	2,000	0	1,200	200	4,185	33,665	1,040	.....
331	St. Paul	.....	.....	.....	(242,630)	.....	242,630	23,307	23,277	.....	5,965	80,061	13,916	55,572	19,502	3,060
332	St. Paul Water	.....	7,484	50,520	1,900	19,236	21,136	2,535	2,773	.....	.....	2,633	13,916	55,572	19,502	3,060
333	Winona*	375	2,377	.....	(95,706)	.....	21,136	2,419	2,850	.....	.....	2,633	13,916	55,572	19,502	10,412
MISSISSIPPI.																
334	Jackson	0	0	7,500	1,000	2,900	3,900	125	.....	.....	.....	950	1,800	12,700	.....	.....
335	Meridian	.....	.....	.....	1,500	5,400	10,900	350	500	.....	.....	0	625	10,000	0	25
336	Natchez	.....	.....	.....	253	14,000	9,475	(525)	.....	.....	0	300	2,050	18,863	1,855	.....
337	Vicksburg	2,500	.....	2,500	.....	.....	14,283	1,180	600	.....	.....	.....	.....	.....	.....	.....
MISSOURI.																
338	Butler	125	75	800	1,650	4,800	4,800	433	200	0	1,200	1,380	3,222	9,732	.....	591
339	Carrollton	100	75	380	475	8,770	10,270	685	422	.....	1,500	500	3,107	14,852	1,000	2,735
340	Cardoche	99	115	484	698	10,600	12,100	1,152	560	.....	300	579	2,561	15,339	.....	5,978
341	Chillicothe*	.....	.....	.....	1,200	6,135	7,395	723	508	.....	1,000	1,350	3,581	10,976	2,000	5,295
342	Columbia	.....	.....	192	(5,320)	.....	5,920	430	98	.....	.....	190	703	6,820	2,000	2,517
343	Do Soto	.....	193	193	.....	2,505	2,905	647	224	.....	.....	960	1,622	4,720	1,500	2,127
344	Hamblin	836	1,083	10,901	1,500	17,322	13,822	1,139	1,604	10	3,210	1,850	7,807	37,617	3,000	100
345	Independence	.....	90	2,470	1,375	5,337	6,712	830	433	85	1,293	180	2,634	11,865	.....	.....
346	Jefferson City*	.....	300	300	1,350	6,250	7,000	700	308	101	.....	2,419	3,528	11,157	2,301	6,804
347	Kansas City	124,570	4,309	88,205	3,000	153,159	136,139	22,698	8,293	205	9,755	22,025	62,578	390,231	0	7,121
348	Lexington	.....	.....	.....	.....	4,240	5,240	240	300	0	.....	265	803	6,445	0	765
349	Louisiana	0	200	0	1,000	6,609	6,099	745	1,003	0	2,470	778	3,595	10,595	3,000	5,195
350	Maryville	.....	.....	.....	1,500	6,503	8,003	566	500	.....	1,114	446	1,812	9,615	1,839	.....
351	Mexico	500	520	1,000	2,000	9,614	10,914	.....	.....	.....	.....	.....	3,503	.....	.....	.....
352	Mohealy	121	1,000	.....	1,200	7,567	8,767	718	365	.....	1,503	.....	.....	.....	5,000	.....
353	Neosho	185	150	499	900	4,400	4,400	.....	.....	.....	.....	.....	.....	.....	.....	.....
354	Proctor City	80	150	940	900	3,900	4,400	.....	.....	.....	.....	.....	.....	.....	.....	.....
355	Proctor City	47	110	157	800	4,187	4,987	344	124	.....	771	623	1,812	6,556	4,449	.....
356	Rich Hill	.....	561	922	1,000	4,075	5,075	590	165	.....	.....	305	1,060	7,037	949	.....
357	Saint Charles	.....	5,208	17,471	2,167	58,309	7,629	515	3,84	.....	3,84	25,990	39,745	115,535	.....	.....
358	Saint Joseph	9,853	.....	.....	55,142	.....	58,309	7,629	1,882	515	.....	131,132	243,912	1,072,310	10,323	.....
359	Saint Louis	38,100	67,649	126,386	20,524	681,478	702,002	86,653	20,363	5,822	.....	2,400	243,912	1,072,310	10,323	.....
360	Seaside	.....	14,000	924	2,000	13,773	21,773	1,735	1,232	.....	2,400	1,266	9,931	28,898	967	.....
361	Seaside	.....	102	600	2,800	13,970	18,770	6,390	576	200	1,800	455	9,931	56,463	1,500	12,884
362	Springfield	24,817	.....	26,267	2,800	3,625	3,625	250	242	.....	.....	.....	917	4,572	0	453
MONTANA.																
363	Ruthe City	.....	2,537	2,537	2,000	24,194	26,194	.....	90	1,754	6,895	.....	.....	38,065	9,222	.....
NEBRASKA.																
364	Beatrice	1,586	175	1,181	1,500	11,344	12,844	1,157	2,092	.....	.....	4,275	7,524	23,310	4,808	.....
365	Fremont*	.....	.....	2,107	1,200	8,873	10,073	.....	.....	.....	.....	.....	1,947	14,127	0	9,239

*Statistics of 1886-87.

*Statistics of 1886-87.

*Statistics of 1886-87.

TABLE 23.—Statistics for 1887-88 of Expenditures of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

Expenditures of School Mo neys.																		
City or Town.	Permanent.					Tuition.				Incidental.						Total Expenditure for Schools.	Paid on Bonded Indebtedness.	Amount Carried Forward to Next Year.
	Sites and Build- ings.	Furniture.	Libraries and Apparatus.	Permanent Re- pairs.	Total Permanent.	Salaries of Super- intendents, etc.	Salaries of Teach- ers.	Total Tuition.	Officers of School Boards, Clerks, Janitors, etc.	Fuel and Lights.	School Books Supplied for Use of Pupils.	Interest on In- debtedness.	All other Current Expenses.	Total Incidental.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
NEBRASKA—con.																		
Grand Island.....	\$1,235	\$297	\$20	\$1,970	\$3,522	\$1,650	\$14,089	\$15,739	\$1,740	\$1,155		\$2,617	\$995	\$6,507	\$34,303	0	\$8,580	
Hastings.....	16,000	0	0	0	16,000	1,500	9,428	10,928	1,127	2,153	0	835	3,240	7,375	18,456	0	9,560	
Kearney.....	1,200				1,200	1,000	9,629	10,629						6,827	104,502		32,530	
Lincoln.....	44,932	7,553	100	2,042	54,627	1,200	33,097	34,297	3,212	3,373	\$10	3,000	5,983	15,578	104,502			
Omaha.....	163,175	10,915	0	0	174,090	3,600	157,082	160,682	26,025	12,573	11,120	10,569	78,691	138,978	473,750	\$22,216	187,767	
Plattsmouth.....																		
NEVADA.																		
Carson City.....	0	0	50	47	97	2,000	6,101	8,101	949	434	0	0	298	1,054	9,755	0	336	
Gold Hill.....	982		303		1,285					1,763					10,583			
Virginia City.....	0	601	231	0	882	0	16,550	16,550						4,302	21,734	0		
NEW HAMPSHIRE.																		
Claremont.....		75	205	929	1,209		7,465	7,465	391	702			548	1,641	10,315		1,309	
Concord.....	0	0	0	1,280	1,280	1,450	20,691	22,141	0	1,518	1,483	0	9,748	12,749	28,587	0	973	
Dover.....			150	3,604	3,754	1,758	17,804	19,562	1,485	1,540	1,750	0	3,796	5,571	14,920		3,295	
Keene.....	1,300				(a)	(42,628)	9,227	42,628	1,184	3,506	566		3,380	11,453	58,679		94	
Manchester.....		856		3,712	4,598	430	21,307	24,737	3,215	3,508			6,099	11,882	36,569	0	68	
Nashua.....				(a)	(a)	430	17,026	19,418	2,784	2,116	653	0	151	3,082	26,124		0	
Portsmouth.....			388	3,206	3,594	1,620	19,416	20,416	803	2,008	120			1,882	26,124		0	
Rochester.....	0	0	72	200	272	787	12,416	13,203	758	816	219	633	1,069	4,145	17,620	3,426	115	
Somersworth.....				732	732		7,122	7,122		(1,231)	1,173	180		2,554	10,458	2,000	1,225	

NEW JERSEY.									
384	Atlantic City*	.....	2,786	2,947	9,551	.....	583	1,006	.....
385	Bayonne	.....	2,563	2,947	25,913	.....	1,185	1,741	.....
386	B Camden	.....	2,563	2,947	27,451	.....	906	8,000	.....
387	Elizabeth C.	.....	6,803	7,900	47,000	.....	7,000	4,251	.....
388	Gloucester*	.....	2,563	2,947	47,000	.....	4,251	836	.....
389	Harrison	.....	2,563	2,947	6,100	.....	334	474	.....
390	Jersey City	.....	2,563	2,947	9,000	.....	615	100	.....
391	Lambertville	.....	2,563	2,947	198,786	.....	17,500	3,597	.....
392	Long Branch*	.....	2,563	2,947	6,000	.....	15	16	.....
393	Millville	.....	2,563	2,947	16,913	.....	707	3,318	.....
394	Mont Clair	.....	2,563	2,947	16,970	.....	782	3,311	.....
395	Morrislow	.....	2,563	2,947	11,872	.....	635	3,377	.....
396	Mount Holly	.....	2,563	2,947	6,618	.....	331	3,512	.....
397	New Brunswick	.....	2,563	2,947	23,470	.....	1,405	13,257	.....
398	Newark	.....	2,563	2,947	253,776	.....	14,825	61,691	.....
399	Orange	.....	2,563	2,947	21,992	.....	1,510	4,979	.....
400	Passaic	.....	2,563	2,947	15,947	.....	2,513	31,722	.....
401	Paterson	.....	2,563	2,947	91,000	.....	5,700	7,389	.....
402	Phillipsburg	.....	2,563	2,947	14,305	.....	59	24,378	.....
403	Pinefield	.....	2,563	2,947	12,866	.....	1,262	18,825	.....
404	Rahway	.....	2,563	2,947	20,625	.....	967	28,957	.....
405	Salem	.....	2,563	2,947	11,101	.....	538	2,670	.....
406	Trenton	.....	2,563	2,947	9,580	.....	387	1,760	.....
407	Weehawken	.....	2,563	2,947	43,467	.....	3,253	15,263	.....
NEW YORK.									
408	Albany	.....	2,474	2,474	160,369	.....	10,349	2,583	.....
409	Adrian	.....	2,474	2,474	8,365	.....	755	1,295	.....
410	Albion	.....	2,474	2,474	43,194	.....	141	8,963	.....
411	Albion	.....	2,474	2,474	9,371	.....	731	4,580	.....
412	Albion	.....	2,474	2,474	7,574	.....	59	8,101	.....
413	Binghamton	.....	2,474	2,474	30,693	.....	4,502	61,864	.....
414	Buffalo	.....	2,474	2,474	1,122,124	.....	96,466	241,124	.....
415	Buffalo	.....	2,474	2,474	398,711	.....	21,721	630,374	.....
416	Catskill	.....	2,474	2,474	6,576	.....	8,712	43,752	.....
417	Catskill	.....	2,474	2,474	4,965	.....	350	7,332	.....
418	Catskill	.....	2,474	2,474	23,767	.....	1,560	7,927	.....
419	Cornwall	.....	2,474	2,474	8,475	.....	416	3,550	.....
420	Danville	.....	2,474	2,474	4,367	.....	1,541	9,172	.....
421	Dunkirk	.....	2,474	2,474	18,309	.....	700	3,400	.....
422	Dunkirk	.....	2,474	2,474	17,469	.....	2,500	21,245	.....
423	Elmira	.....	2,474	2,474	6,589	.....	0	1,109	.....
424	Elmira	.....	2,474	2,474	6,589	.....	62	7,706	.....
425	Flushing*	.....	2,474	2,474	44,706	.....	3,193	3,852	.....
426	Geneva	.....	2,474	2,474	13,014	.....	800	3,468	.....
427	Gloversville	.....	2,474	2,474	9,668	.....	0	2,973	.....
428	Gloversville	.....	2,474	2,474	12,380	.....	608	12,611	.....

* Includes \$3,816 cost of industrial schools.

* Column 3 includes repairs.

* The financial statement is for 10 months.

* Statistics of 1886-87.

* Including all "supplies."

* Owing to a change in the fiscal year these figures cover fifteen months.

453	Owego.....	3,200	1,206	1,270	5,736	0	12,434	12,434	1,549	609	0	0	0	992	3,200	21,370	0	3,067
454	Penn Yan.....	318	144	1,238	1,700	1,700	7,268	7,268	627	500	18	363	1,985	3,637	21,370	9,418	5,710	0
455	Pittsburg.....	35	320	1,011	1,700	1,700	10,416	12,116	514	1,020	0	0	1,633	2,163	17,429	4,690	258	0
456	Port Chester.....	35	500	1,896	19,246	1,800	13,400	8,400	690	245	0	0	2,460	4,794	38,934	4,665	19,647	0
457	Port Jervis.....	168	1,891	1,896	3,955	1,600	23,631	31,231	2,491	1,084	0	0	3,770	8,593	43,779	0	15,342	0
458	Poughkeepsie.....	1,087	1,087	16,162	97,047	2,200	176,674	178,874	20,737	16,021	1,556	0	2,603	41,977	317,858	0	30,486	0
459	Recherster.....	217	1,217	615	2,052	1,600	14,983	16,583	1,200	859	0	0	2,300	41,359	21,982	0	15,342	0
460	Rome.....	1,229	344	2,248	4,223	1,550	21,953	23,143	2,971	1,631	0	0	1,224	8,691	23,217	1,723	30,778	0
461	Saratoga Springs.....	23	213	1,299	5,535	2,000	9,552	9,752	852	758	0	0	1,224	2,370	36,329	4,360	26,754	0
462	Seneca Falls.....	71	71	903	21,102	1,954	10,994	12,848	751	844	0	58	7,717	2,370	36,329	1,150	1,104	0
463	Sing Sing.....	140	272	12,228	47,872	2,500	141,976	154,076	10,289	9,956	2,553	630	7,414	30,812	222,796	0	725	0
464	Spencer.....	1,645	2,945	108	380	5,300	5,300	5,300	100	450	0	0	200	750	6,440	0	725	0
465	Tarrytown.....	0	300	700	1,000	1,050	3,640	4,690	100	450	0	0	200	750	6,440	0	725	0
466	Tonawanda.....	0	300	700	1,000	1,050	3,640	4,690	100	450	0	0	200	750	6,440	0	725	0
467	Troy.....	14,000	500	7,700	1,000	2,300	109,000	111,300	10,775	4,485	720	0	6,998	17,946	91,911	0	8,428	0
468	Ulster.....	2,453	670	7,252	4,218	1,500	67,247	69,747	5,459	5,188	301	0	1,155	1,155	10,068	0	0	0
469	Watford.....	0	102	1,060	1,334	1,200	6,409	7,609	719	436	0	60	2	889	11,615	1,000	980	0
470	Watertown.....	1,238	176	2,061	3,475	1,500	7,251	7,251	438	389	0	0	2,575	6,264	39,343	0	0	0
471	West New Brighton.....	53	53	875	10,542	1,500	21,037	22,537	1,260	2,217	212	0	2,575	6,264	39,343	0	0	0
472	White Plains.....	426	129	2,064	2,619	1,500	8,827	9,827	690	355	680	0	2,307	3,912	16,408	0	2,515	0
473	Yonkers.....	0	0	0	0	0	6,225	6,225	75	700	500	300	4,289	15,875	83,277	2,296	6,268	0
474	Yonkers.....	13,910	1,072	4,807	22,331	3,300	41,771	45,071	3,996	2,451	4,190	900	4,289	15,875	83,277	2,296	6,268	0
475	Durham.....	0	0	0	0	0	0	0	96	0	0	0	200	0	3,600	0	0	0
476	Payetteville.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
477	New Bern*.....	97	97	5,267	1,597	1,700	10,235	11,935	0	0	0	0	0	1,504	18,706	0	183	0
478	Raleigh.....	200	200	1,597	1,597	880	2,251	3,171	0	0	0	0	0	186	4,957	0	0	0
479	Redsville.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
480	Winston.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
481	Akron.....	2,441	1,719	6,243	10,503	2,500	43,876	46,376	5,965	511	75	9,550	4,689	22,771	79,676	10,000	42,245	0
482	Alliance.....	0	0	0	0	1,300	8,543	9,843	653	0	3	780	3,785	5,732	25,573	2,005	5,765	0
483	Ashtabula.....	0	0	4,614	4,725	1,500	10,778	12,278	1,728	363	0	1,066	3,697	7,454	24,437	0	6,817	0
484	Bellefleur.....	0	0	0	0	1,200	8,055	9,255	455	1,645	0	0	0	2,100	12,655	0	7,187	0
485	Bellefontaine.....	0	0	0	0	1,700	6,422	8,122	0	0	0	0	0	3,452	19,261	0	5,762	0
486	Bucyrus.....	7,687	0	0	7,687	1,800	27,379	29,179	(800)	0	0	0	26,651	91,908	91,908	11,096	28,952	0
487	Canton.....	35,731	0	0	0	1,800	27,379	29,179	1,900	718	50	0	6,984	9,652	36,982	0	12,571	0
488	Chillicothe.....	145,555	6,337	23,632	175,524	2,200	26,330	28,530	1,900	718	50	0	6,984	9,652	36,982	0	12,571	0
489	Cincinnati.....	80	80	2,089	2,169	4,500	601,270	603,770	40,916	5,898	1,340	0	74,340	122,484	903,778	0	72,743	0
490	Cincinnati*.....	190,273	27,430	11,912	229,833	1,800	418,959	430,759	1,350	300	50	0	2,269	3,998	23,030	2,870	16,772	0
491	Cleveland.....	53,188	3,653	30,171	89,570	21,450	124,741	146,191	20,300	3,371	290	14,285	46,065	136,843	897,435	0	0	0
492	Columbus.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
493	Dayton.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
494	Dayton*.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

* Statistics of 1886-87.

a Expenditure for furniture, books, and apparatus, \$1,458.

b Expenditure for permanent repairs, with current expenses, \$5,206.

c Deficit (1887-88), \$3,616. Total deficit carried forward, \$6,770.

d Equipment of manual training school.

e Amount of overdraft, \$14,832.

621 Sandusky	2, 164	0	0	2, 164	1, 703	26, 050	27, 750	2, 814	1, 800	350	0	6, 152	11, 116	41, 030	16, 565	21, 151
622 Sidney					1, 800	59, 566	61, 366						22, 281		15, 846	18, 729
623 Springfield					1, 750	25, 956	25, 706						5, 403	38, 561	38, 561	22, 641
624 Steubenville			542	1, 822	1, 440	12, 430	13, 840	100	740	135	0	1, 504	5, 560	19, 430	35, 660	12, 651
625 Tiffin			324	0	4, 400	95, 128	95, 619	7, 365	5, 554	279	0	6, 891	35, 620		35, 620	62, 061
626 Toledo	40, 008	1, 469	0	1, 799	2, 521	11, 596	13, 396	1, 110	1, 683	25	0	1, 008	3, 683	23, 415	10, 620	9, 663
627 Urbana	15, 000	1, 000	0	2, 056	1, 800	8, 280	9, 380	6, 655	2, 000	50	0	1, 000	3, 685	31, 565	14, 779	14, 779
628 Van Wert			0	2, 560	1, 100	11, 629	11, 150	1, 175	330	79	345	3, 310	5, 209	16, 893	1, 500	7, 287
629 Washington C. H.			223	331	564							2, 485	3, 495	17, 135	9, 704	
630 Wooster*	0	0	0		1, 800	11, 840	13, 640	870								
631 Xenia			525		2, 000	32, 712	34, 712				1, 350	14, 461	15, 811	55, 081	0	24, 472
632 Youngstown	4, 032	0	189	2, 215	2, 974	36, 586	38, 586	4, 068	832			5, 365	10, 255	51, 845	2, 025	7, 941
633 Zanesville*	1, 827	383			2, 030											
OREGON.																
634 Astoria																
635 Portland	13, 860	2, 979	117	1, 162	2, 000	70, 520	72, 520	1, 372	136	0	0	4, 531	5, 833	12, 003	2, 337	5, 725
636 Salem	5, 943	1, 100	75	7, 193	1, 030	6, 109	7, 100	1, 403	2, 468	0	0	13, 063	21, 699	114, 637	10, 000	7, 865
PENNSYLVANIA.																
637 Allegheny	99, 648	533	(7, 119)	106, 767	2, 209	139, 105	141, 306	1, 750	21, 395	0	0	17, 153	21, 684	67, 374	9, 560	50, 268
638 Allentown	4, 746	668	0	5, 279	1, 975	28, 712	30, 687	2, 919	1, 850	116	0	6, 374	31, 408	74, 333	4, 000	3, 003
639 Altoona	36, 147	0	0	2, 890	3, 675	26, 534	26, 534	3, 793	1, 104	0	0	1, 623	8, 124	14, 827	2, 813	68
640 Ashland			150	2, 800	2, 950	7, 332	10, 190	1, 091	741	0	0	1, 690	3, 255	14, 827	1, 953	411
641 Beaver Falls				227		(10, 190)		2, 000								
642 Bellefonte	5, 126	130	0	489	5, 745	4, 660	5, 660	766	403	15	0	1, 799	686	20, 504	5, 430	70
643 Bethlehem	12, 562	212	0	12, 773	1, 020	5, 614	6, 631	418	1, 100	0	0	576	2, 094	21, 501	3, 603	106
644 Braddock	1, 637	260	0	484	2, 653	6, 589	7, 649	451	174	30	0	1, 600	600	13, 157	3, 529	173
645 Bradford			0	626	1, 400	13, 592	14, 992	1, 761	786	0	0	2, 355	5, 944	21, 432	710	
646 Bristol		44	0	681	725	5, 761	6, 301	1, 142	446	357	482	311	2, 738	9, 761	1, 060	834
647 Butler	404	791	109	1, 716	1, 520	6, 680	7, 200	900	717			840	2, 817	21, 745	455	
648 Carlisle	(9, 884)			9, 881	11, 514	1, 202	1, 202	(a)				h1, 652	2, 854	12, 875	1, 000	2, 513
649 Chambersburg	6, 319	675	120	7, 354	800	11, 793	12, 593	1, 121	550	400	410	1, 296	3, 747	25, 174	41, 480	j 0
650 Chester				1, 597	1, 932	10, 854	12, 190	946	491	88	104	7, 093	9, 355	23, 456		0
651 Conshohocken*				932	150	5, 710	5, 860	750	441			1, 360	8, 132			2, 435
652 Cory				1, 441		9, 131	9, 131	100	810			3, 844	4, 760	15, 333		1, 108
653 Danville				3, 097	500	9, 356	10, 456	140	565				1, 465	15, 018		
654 Du Bois	2, 110	570	100	317	1, 100	27, 477	27, 477	4, 849	2, 235	300	50	4, 321	11, 765	42, 280	3, 000	4, 139
655 Easton*			99	2, 255	1, 600	52, 082	51, 582	8, 781	3, 142	960	0	5, 097	17, 970	14, 777	0	2, 059
656 Erie			0	1, 437	2, 500	6, 534	7, 534	7, 534	76	0	132	0	753	10, 023	400	80
657 Greenville			980	754	1, 731	1, 800	6, 534	6, 534	76	250	4, 702	1, 867	16, 303	97, 213	0	14, 845
658 Harrisburg	18, 105	480	0	4, 427	23, 012	56, 098	57, 598	6, 853	2, 001							

* Statistics of 1886-87.

a Includes all permanent expenses.

b Account overdrawn.

c Account overdrawn \$416.

d Included in Column 14.

e Includes principal of indebtedness also.

f Deficit, \$1,906.

g The items amount to \$11,763; they include the pay-

ment of orders amounting to \$1,183 outstanding

from previous years.

h Expenses for light and fuel included in Column 14.

i Deficit, \$390.

j Deficit, \$41.

TABLE 23.—Statistics for 1887-88 of Expenditures of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

Expenditures of School Moneys.																	
City or Town.	Permanent.				Tuition.				Incidental.						Total Expenditure for Schools.	Paid on Bonded Indebtedness.	Amount Carried Forward to Next Year.
	Sites and Buildings.	Furniture.	Libraries and Apparatus.	Permanent Repairs.	Total Permanent.	Salaries of Superintendents, etc.	Salaries of Teachers.	Total Tuition.	Officers of School Boards, Clerks, Janitors, etc.	Fuel and Lights.	School Books Supplied for Use of Pupils.	Interest on Indebtedness.	All Other Current Expenses.	Total Incidental.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PENNSYLVANIA—continued.																	
562 Hazleton.....	\$5,000		\$200	\$1,958	\$2,158	\$1,500	\$12,153	\$13,653	\$1,102	\$519	\$113	\$504	\$378	\$2,616	\$18,427	\$2,500	\$3,016
563 Ironsdate.....			100	391	5,491	1,400	5,943	7,373	500	289		421	500	1,710	14,574	2,000	637
564 Johnstown.....				820	1,620	1,000	(15,312)	15,512	251	(a)	127	585	a3,049	4,012	20,344		616
565 Lancaster.....	8,667	\$923		2,773	12,383	1,500	34,415	35,915	632	2,219	11,195	2,865			69,079	5,000	
566 Lebanon.....	13	513	0	794	2,680	800	12,305	13,105	713	733		1,085	500	3,091	20,876	2,000	6,326
567 Lewisburg.....						585	3,360	3,945	360			675					
568 Lock Haven.....	0	500	100	800	1,400	1,000	6,900	8,000	700	750					20,700		
569 McKeesport.....	0	737	150	1,676	2,623	1,500	17,976	19,476	2,200	1,611		2,277	2,085	8,203	30,302	0	3,422
570 Mahanoy.....	3,615	343	100	2,518	6,066	1,200	10,118	11,318	1,143	573		636	2,153	4,505	22,429	200	15,458
571 Meadville.....	1,279	0		1,357	2,636	1,500	18,951	20,451	3,602	1,000	2,877	225	287	7,766	30,853	2,887	837
572 Milton.....	0	0	25	0	25	1,000	3,940	4,940	263	259		225	325	1,102	5,717	1,073	301
573 Monongahela.....	308	0		423	731	0	6,454	6,454	609	200	0	1,330	493	2,632	9,817	1,600	845
574 Nanticoke.....	700	2,183	0		2,883	1,000	9,312	10,312	1,013	(1,216)		1,245	2,036	3,509	18,734	0	1,725
575 New Brighton.....						965	5,092	6,382									
576 New Castle.....	24,000	1,000	100	500	25,600	1,200	13,950	15,150	1,250	500	75	350		8,606	47,123	8,800	60
577 Norristown.....		980		1,034	2,610	1,400	24,159	25,559	2,915	1,144	2,198	1,253		882	26,658	6,796	1,130
578 Oil City.....	2,389		165	2,185	4,739	2,000	15,205	17,205	1,330	570	1,982		746	4,714	4,899		626
579 Olyphant.....		0				0	3,405	3,405		125		337					
580 Philadelphia.....	460,833	37,833	10,858	159,567	208,258	48,600	1,375,777	121,685	56,553	55,533	114,323		148,684	414,245	2,028,280		416,115
581 Phoenixville.....	0	0	0	1,980	1,980	1,200	9,749	10,949	1,305	904	896	1,565	90	4,761	17,690	1,000	50
582 Pittsburg.....						3,500	340,190	343,690	5,053	26,269		47,236	65,398	143,956	624,005	106,650	175,273
583 Reading.....			0	347	1,000	1,000	8,082	9,082	709	532	98	285	249	1,873	11,302	0	9,880
584 Plymouth.....	0	0	0	627	627		7,073	7,073	879	265	0	425	981	2,550	10,250	1,469	
585 Plymouth.....	15,544	525			16,069	0	9,633	9,633	1,517	1,101		857	2,102	5,577	30,079		370
586 Reading.....	10,042	1,300	400	5,069	16,811	2,000	60,100	62,100	9,914	5,917	128	2,922	2,435	23,317	100,228	29,300	10,390

587	Scranton	29,236	10,599	39,835	3,086	93,560	96,647	5,781	2,610	4,126	6,510	19,027	155,599
588	Sharpsburg		50	300	900	4,320	4,320						4,620
589	Shenandoah	1,273	515	3,345	1,630	14,749	16,320	2,702	980	721	1,421	7,120	28,967
590	South Bethlehem		116	1,008	1,724	3,627	7,052	702	406	0	0	2,088	13,439
591	South Easton		50	200	400	1,000	7,984	8,981	395	637	660	2,787	12,171
592	Susquehanna	6,293	33	72	8,096	3,184	3,184	741	263	376	63	1,445	12,725
593	Tannaqua	0	0	1,185	1,185	5,271	6,371	713	213	806	810	2,254	9,810
594	Titusville	0	0	0	1,800	14,515	16,315	200	0	0	8,880	9,080	25,365
595	Tyone				1,800	4,434	5,634	568	84	31	0	0	7,193
596	Warren		263	214	477	8,770	8,770	702	450	990	287	2,429	11,476
597	Washington	5,000	144	1,034	6,773	8,861	8,861	941	956	325	319	1,981	17,620
598	West Chester			0	0	10,755	12,055	1,200	960	2,030	21,560	27,313	39,368
599	Wilkesbarre	12,013	3,018	15,031	3,200	43,630	46,830	5,985	2,771	0	0	11,887	73,748
600	Williamsport	23,500	1,834	4,738	36,581	38,684	37,184	350	33	720	6,272	9,214	13,218
601	York	0	132	800	952	23,032	24,332	2,113	1,212	61	2,639	6,065	31,379
RHODE ISLAND.													
602	Bristol	0	0	628	600	9,420	10,020	(1,477)	744	0	1,225	3,145	13,794
603	Burlington				350	11,374	11,724	1,102	960	356	881	3,229	21,063
604	Central Falls	5,030	100	1,000	300	7,353	7,653					1,457	9,310
605	Cranton	0	200	0	200	17,353	17,881					2,335	14,840
606	Cumberland	0	432	0	624	11,606	11,881	1,335	1,185	14	45	2,887	19,572
607	East Providence				1,373	14,206	14,706	1,235	1,783	0	871	3,493	19,010
608	Johnston	(21,180)	193	408	300	10,825	11,125	150	1,783	454	0	2,887	14,010
609	East Johnston	458	0	408	300	10,825	11,125	150	1,783	0	2,134	8,335	19,326
610	Newport	1,727	794	5,115	7,636	37,124	40,124	3,623	3,359	219	0	16,025	56,531
611	Pawtucket	(26,903)	474	6,243	2,000	44,896	46,896	6,627	3,994	0	5,404	16,025	56,531
612	Providence	(31,773)	611	39,515	91,238	224,613	224,613	7,800	730,309	4,862	17,256	53,227	369,133
613	South Kings-												0
614	town		316	100	425	9,537	10,012		200		14	214	10,644
615	Westerly	5,600	500	475	400	13,855	14,255	714	1,018	1,924	772	4,453	25,367
616	Woonsocket	0	0	2,000	1,500	20,257	21,757	2,536	2,008	0	1,435	7,833	31,090
SOUTH CAROLINA.													
617	Charleston	1,500	200	2,500	2,500	61,462	63,962					719	64,711
618	Columbia	18,000	616	1,020	1,020	9,005	10,025					737	23,216
619	Greenville				1,000	3,256	4,256	109	114	0	0	0	0
TENNESSEE.													
620	Chattanooga	26,900	577	1,324	1,800	26,215	28,015	1,417	624	0	1,145	3,186	60,092
621	Clarksville	800	77	121	1,500	6,877	8,377	138	209	0	325	699	10,074
622	Jackson	343	145	216	1,500	6,745	8,245	225	282	27	750	9,701	34,331
623	Knoxville	500	242	742	1,500	28,804	30,304	100	826		2,358	3,254	34,331
624	Memphis	3,189	637	2,671	3,300	46,985	50,285	4,376		2,404	6,018	12,798	69,580
625	Union City												49,734
626													309

* \$3,250 merged.

e Includes also permanent repairs.

f Pay of janitors included in Column 11.

g Returned to town treasury.

h Applied to deficit of previous year.

i Deficit of \$14,958.

* Statistics of 1886-87.

a Expenses for light and fuel included in column 14.

b Deficiency, \$3,641.

c Paid from a separate fund not included in the totals.

TABLE 23.—Statistics for 1887-88 of Expenditures of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

Expenditures of School Moneys.																			
City or Town.	Permanent.					Tuition.					Incidental.						Total Expenditure for Schools.	Paid on Bonded Indebtedness.	Amount Carried Forward to Next Year.
	Sites and Buildings.	Furniture.	Libraries and Apparatus.	Permanent Repairs.	Total Permanent.	Salaries of Superintendents, etc.	Salaries of Teachers.	Total Tuition.	Officers of School Boards, Clerks, Messengers, etc.	Fuel and Lights.	School Books Supplied for Use of Pupils.	Interest on Indebtedness.	All Other Current Expenses.	Total Incidental.					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
TEXAS.																			
Austin.....	0	\$140	\$100	\$506	\$606	\$1,800	\$28,503	\$30,303	\$1,235	\$631			\$2,383	\$5,897	\$36,199	\$15,300	\$3,519		
Brenham.....	\$11,949				11,949	1,200	9,680	10,880	365	220			846	1,431	12,917		386		
Brownsville.....	6,800				6,800	1,300	4,400	5,700	420	300		0	1,513	2,238	19,887		24,298		
Denison.....		128	187	434	749	2,200	11,835	13,335	1,035	500			991	2,526	22,661		11,551		
El Paso.....	0	0	0	0	0	2,000	8,405	10,605	810	204		300	1,130	2,444	13,798	0	8,651		
Fort Worth.....	0	0	0	0	12,492	2,400	25,215	27,215	2,322	750	0	0	7,448	4,821	32,036	4,889	15,541		
Galveston.....	-8,262	1,456	104	2,670	50,365	2,400	50,365	52,765	3,054	916		283	7,448	12,731	77,988	4,889	15,541		
Houston.....		79		1,039	1,118	1,666	26,614	28,280	2,227	659	0	0	1,941	4,827	34,225	0	9,989		
Palestine.....	500	0	0	0	500	1,500	4,900	6,400	330	96	0	0	75	501	7,401	0	2,207		
Paris.....																			
Sherman.....				500		1,500	10,423	11,923	160	350									
Waco.....	8,842	1,009		934	10,875	1,500	18,876	20,376						3,559	34,810	7,091			
UTAH.																			
Ogden.....	6,179	482	309	479	7,449	(6,771)	3,087	6,771	2,401	0	0	253	868	3,527	17,747	0	144		
Provo City.....	3,273	163	147	628	4,211	900		4,587	80	157	\$57		162	456	9,254		941		
VERMONT.																			
Bennington.....				126	126	1,200	4,572	5,772	390	383	124	405	2,384	3,781	9,679	10,947	2,915		
Brattleborough.....															19,682		62		
Rockingham.....	5,500	200	100	350	6,150	83	7,512	7,595	300	550	700			15,531	15,531	0			
Rutland.....	8,174	635		889	9,758	(13,272)		13,272	1,100	1,092	1,195	885	961	5,233	28,263	1,000	1,448		
Saint Johnsbury.....	0	29	108	529	656	0	8,170	8,170	1,900	954	0	834	3,738	6,426	15,232	3,000	2,896		
VIRGINIA.																			
Alexandria.....	3,000	400	35	1,510	4,945	380	11,159	11,539	1,345	555	0	73	481	2,454	18,938	0	3,429		
Fredericksburg.....	0	5	45	130	240	200	3,875	4,075	259	220	17	0	276	772	5,087	0	2,003		

645	Lynchburg.....	6,500	626	86	774	7,956	2,972	22,497	25,469	1,156	1,039	86	0	726	3,007	36,462	0	105
646	Norfolk.....	3,600	585	0	515	600	1,125	13,250	13,850	925	494	494	0	740	2,624	22,959	0	430
647	Petersburg.....	12,454	3,958	0	822	5,007	2,000	13,176	20,301	1,643	924	91	0	635	3,298	28,006	0	250
648	Richmond.....	12,454	3,958	0	2,770	13,182	2,000	96,701	96,701	6,732	3,494	1,903	0	5,735	17,772	135,655	0	0
649	Staunton.....	308	0	0	308	308	800	6,780	7,580	463	543	25	0	751	1,782	9,670	0	703
650	Winchester.....	0	91	79	100	270	463	4,334	4,794	485	415	25	0	139	1,064	6,123	0	49
WASHINGTON.																		
651	Tacoma.....	7,095	1,249	0	5,533	13,877	1,350	13,892	15,242	3,435	844	204	1,705	1,769	7,957	37,076	0	8,530
652	Walla Walla.....	0	76	0	184	260	0	8,222	8,222	0	0	0	0	0	1,937	10,418	0	0
WEST VIRGINIA.																		
653	Charleston*	0	231	100	0	331	1,200	8,680	9,880	530	300	0	0	256	596	11,346	0	2,205
654	Grafton.....	1,077	0	0	183	1,291	800	3,280	4,080	250	60	20	860	2,103	4,518	12,337	0	961
655	Martinsburg.....	0	0	0	0	0	200	7,619	7,819	773	782	0	0	0	0	0	0	0
656	Parkersburg.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
657	Wheeling.....	27,219	(6,004)	0	3,307	36,530	1,630	50,250	51,930	3,039	411	412	1,008	5,006	9,996	98,456	24,449	4,861
WISCONSIN.																		
658	Appleton.....	5,375	511	828	1,000	7,714	450	21,700	22,210	1,500	1,232	0	687	501	3,920	33,844	7,000	3,081
659	Baraboo.....	0	123	174	444	711	300	7,684	7,984	1,086	1,304	0	0	534	1,069	10,394	5,223	6,641
660	Beloit.....	757	0	84	731	818	200	9,869	10,069	1,086	1,304	0	0	0	2,251	10,519	0	10,359
661	Berlin.....	0	94	146	0	997	0	7,271	7,271	1,771	264	0	0	1,216	2,649	17,186	0	5,136
662	Chippewa Falls.....	2,350	542	211	1,055	4,153	1,650	8,729	10,379	1,254	2,069	0	0	1,865	2,649	17,186	0	7,645
663	Fond du Lac.....	2,240	285	245	1,488	4,258	400	16,657	17,057	2,105	2,311	0	0	421	4,867	26,182	0	5,146
664	Port Howard.....	0	100	87	702	889	250	6,519	6,769	660	983	15	0	1,616	2,291	9,274	0	1,657
665	Green Bay.....	2,773	477	0	757	4,007	250	11,074	11,364	891	983	0	0	955	2,830	18,201	2,061	777
666	Janesville.....	0	0	0	1,802	1,802	1,500	12,521	14,021	2,040	1,315	57	0	1,438	4,889	20,630	0	8,719
667	Kenosha*	0	225	18	740	758	200	6,125	6,325	925	2,540	2,132	0	4,216	12,635	50,133	0	3,804
668	La Crosse.....	50,118	3,356	55	88	3,010	2,100	41,074	43,174	3,703	3,703	0	0	1,625	1,625	75,587	0	27,803
669	Madison.....	2,358	157	70	0	53,530	2,000	18,432	20,432	10,795	0	0	0	3,206	3,206	16,586	0	11,497
670	Menomonee.....	0	0	0	243	243	0	5,393	5,393	0	0	0	0	1,500	1,500	7,136	0	7,445
671	Merrill.....	0	0	567	567	567	23,000	23,000	23,000	25,319	25,001	75	19,097	67,507	318,755	179,660	0	179,660
672	Milwaukee.....	0	672	0	472	1,568	300	7,600	7,600	800	451	75	0	533	2,161	8,035	1,000	5,521
673	Monroe.....	925	89	112	600	600	200	7,325	7,525	635	776	37	140	400	2,562	4,000	0	2,745
674	Neenah.....	0	(803)	0	0	0	200	1,362	1,562	400	3,538	140	0	552	6,956	39,638	0	24,729
675	Oconto.....	0	0	0	3,101	3,969	600	28,141	28,741	2,726	3,538	0	0	141	1,294	9,719	0	1,531
676	Oshkosh.....	0	230	50	379	659	300	7,650	7,950	533	435	0	0	556	4,716	47,110	0	17,123
677	Portage.....	10,083	749	314	1,415	12,591	1,200	28,603	29,803	2,167	1,993	0	0	1,549	5,099	41,312	0	13,630
678	Rhinelander.....	621,104	878	432	(a)	22,214	500	13,329	13,829	1,325	2,225	0	0	0	0	0	0	0
679	Shelbyville.....	0	0	0	716	814	1,000	10,698	11,258	0	0	0	0	2,992	2,992	15,004	0	11,783
680	Stevens Point*	0	0	0	11,412	0	0	6,650	6,650	638	871	1,015	1,880	1,880	4,404	22,406	2,000	9,912
681	Watertown.....	11,205	237	0	799	799	300	9,983	10,283	671	0	0	0	1,272	1,943	13,025	0	7,391
682	Waukesha.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
683	Wausau.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WYOMING.																		
684	Cheyenne.....	1,102	424	297	3,302	5,125	0	16,094	16,094	1,299	761	405	0	2,018	4,484	25,703	1,750	2,911

a Permanent repairs included in Column 1.

* Statistics of 1886-87.

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* Statistien of 1886-87.

There is also one commercial school. Instructors: male 5, female 6; students: male 178, female 135; average daily attendance: male 128, female 97; no foreign languages taught; volumes in library, 10.

Public school library.

TABLE 24.—Statistics for 1887-88 of Public High Schools in Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Number of such Schools.	Number of Instructors.		Whole Number of Students Enrolled.			Average Daily Attendance.			Number Studying no Language but English.		Number in Commercial Course.		Number in Teachers' Training Course.		Number Preparing for College Classical Course.		Number Preparing for College Scientific Course.		Number of Volumes in Library.	Value of Scientific Apparatus.	
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
DELAWARE.																						
59 New Castle	2	1	6	7	82	171	253	60	132	192	0	0					0	0	0	0	75	\$300
60 Wilmington																						
DISTRICT OF COLUMBIA.																						
61 Washington	2	(39)	39		447	911	1,358	(1,145)		1,145			202		3	77					5,000	
FLORIDA.																						
62 Gainesville							24						6	3	16	21					0	100
63 Key West						(24)																
64 Palatka	2	1	1	2	(75)	75	(65)			65	(54)	0	0	0		1	0	0	0	0	450	
65 Pensacola																						
GEORGIA.																						
66 Americus	1	1	1	2	5	34	39	4	32	36											0	
67 Athens																						
68 Atlanta	2	3	7	10	163	365	528				0	0	0	0	0	0	0	0	0	1,000	2,500	
69 Augusta	2	2	1	3	19	150	169	15	125	140	0	0	19	150	0	0				0	500	
70 Columbus	0																					
71 Macon	2	2	3	5	79	115	194	72	91	163	0	0	0	0	0	0	79	115		200	0	
72 Rome	0																					
73 Savannah																				500	1,000	
ILLINOIS.																						
74 Anrova	1	2	2	4	38	76	114	34.5	68.9	103.4	0	0	10	12	0	0	1				480	500
75 Beardstown	1	1	1	2	15	25	40	11	22	33			5	9		4	3	2	3	2	400	150
76 Belleville																						
77 Belvidere	1	1	1	2	18	21	39				9	7	0	0	0	0					60	75

154	Keokuk.....	1	3	2	5	40	100	140	16	38	54	12	22	14	6	0	0	3	4	2	250
155	Lyons.....	1	1	2	3	17	40	57	74	92	166	76	81	14	6	0	0	3	4	2	70
156	Marshalltown.....	1	1	2	8	86	102	188	74	92	166	37	82	0	0	0	0	3	4	2	150
157	Mount Pleasant.....	1	1	2	3	37	82	119	118	118	118	37	82	0	0	0	0	3	4	2	500
158	Muscataine.....	1	1	2	3	67	125	124	(118)	118	118	37	82	0	0	0	0	3	4	2	130
159	Oskaloosa.....	1	1	3	4	67	125	102	(144)	144	144	32	43	17	20	2	14	5	12	3	1,183
160	Ottumwa.....	1	0	3	3	28	71	99	24	65	89	0	0	0	0	0	0	3	4	1	700
161	Stonycity*.....	1	(3)	3	3	23	42	64	24	65	89	0	0	0	0	0	0	3	4	1	1,700
162	Waterloo, East Side.....	1	1	2	3	23	42	64	24	65	89	0	0	0	0	0	0	3	4	1	700
163	What Cheer.....	1	0	1	1	18	22	40	24	65	89	0	0	0	0	0	0	3	4	1	225
KANSAS.																					
164	Atchison.....	1	1	1	2	12	43	55	11	38	49	7	6	0	0	0	0	3	4	1	200
165	Clay Centre.....	1	1	1	2	44	38	82	28	30	58	7	6	0	0	0	0	3	4	1	700
166	El Dorado.....	1	1	1	3	47	23	154	38	22	60	40	18	15	23	5	1	7	7	3	500
167	Emporia.....	1	2	3	5	74	110	184	38	22	60	40	18	15	23	5	1	7	7	3	500
168	Fort Scott.....	1	1	1	2	21	58	79	(58)	58	58	13	21	0	0	0	0	3	4	1	500
169	Hutchinson.....	1	1	1	2	40	29	69	36.6	21.3	57.9	11	15	0	0	0	0	3	4	1	100
170	Independence.....	1	1	2	0	30	47	77	21	37	58	11	15	0	0	0	0	3	4	1	100
171	Kansas City*.....	1	(2)	2	2	101	148	213	95	142	237	40	88	16	9	20	12	6	3	6	773
172	Lawrence.....	1	1	3	4	101	148	213	95	142	237	40	88	16	9	20	12	6	3	6	300
173	Leavenworth.....	1	1	3	2	5	101	148	95	142	237	40	88	16	9	20	12	6	3	6	250
174	Marysville*.....	1	1	1	2	20	28	48	21	47	68	19	20	0	0	0	0	3	4	1	250
175	Newton.....	1	1	1	2	28	53	81	21	47	68	19	20	0	0	0	0	3	4	1	500
176	Ottawa.....	1	2	3	5	28	53	81	21	47	68	19	20	0	0	0	0	3	4	1	200
177	Parsons*.....	1	1	2	3	2	2	70	21	47	68	19	20	0	0	0	0	3	4	1	700
178	Salina.....	1	(2)	3	2	23	30	53	(14)	44	44	3	5	0	0	0	0	3	4	1	110
179	Topeka.....	1	0	3	3	23	30	53	(14)	44	44	3	5	0	0	0	0	3	4	1	250
180	Wichita.....	1	2	2	4	23	30	53	40	50	90	20	25	0	0	0	0	3	4	1	400
181	Winfield.....	1	1	3	4	50	89	139	40	50	90	20	25	0	0	0	0	3	4	1	400
KENTUCKY.																					
182	Bowling Green.....	1	2	3	5	(171)	270	373	100	253	353	0	150	103	2	2	2	2	2	2	450
183	Covington.....	1	2	3	5	(171)	270	373	100	253	353	0	150	103	2	2	2	2	2	2	450
184	Dayton.....	1	2	3	5	(171)	270	373	100	253	353	0	150	103	2	2	2	2	2	2	450
185	Hopkinsville*.....	1	2	3	5	(171)	270	373	100	253	353	0	150	103	2	2	2	2	2	2	450
186	Lexington.....	0	12	13	25	317	553	875	267	469	736	5	7	0	0	0	0	3	4	1	1,005
187	Louisville.....	3	12	13	25	317	553	875	267	469	736	5	7	0	0	0	0	3	4	1	1,005
188	Newport.....	1	1	1	2	3	54	131	50	136	176	5	7	0	0	0	0	3	4	1	1,000
189	Owensboro.....	1	1	1	2	15	39	54	11	32	43	0	0	0	0	0	0	3	4	1	200
190	Paducah.....	1	1	1	2	18	65	83	11	52	63	16	55	0	0	0	0	3	4	1	100
191	Paris.....	1	1	1	2	18	65	83	11	52	63	16	55	0	0	0	0	3	4	1	350
LOUISIANA.																					
192	Baton Rouge*.....	2	5	8	13	103	270	373	100	253	353	0	150	103	2	2	2	2	2	2	450
193	New Orleans.....	2	5	8	13	103	270	373	100	253	353	0	150	103	2	2	2	2	2	2	450

* Statistics of 1896-97.

[illegible]

*Statistics of 1886-87.

TABLE 24.—Statistics for 1887-88 of Public High Schools in Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Number of such schools.	Number of Instructors.		Whole Number of Students Enrolled.			Average Daily Attendance.		Number Studying no Language but English.		Number in Commercial Course.		Number Preparing for College Classical Course.		Number Preparing for College Scientific Course.		Number of Volumes in Library.	Value of Scientific Apparatus.					
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
MASSACHUSETTS—continued.																							
Pittsfield.....	1	2	3	5	45	85	130		(119)	119	2	0	0	0	0	0	0	1		100	\$400		
Plymouth.....	1	1	0	5	70	76	146				25	20	0	0	0	0	0			150	1,500		
Randolph.....	1	1	1	2	35	(95)	95		(75)	75	15	20	15	20	0	0	0	0	0	0	35	100	
Rockland.....	1	1	1	2	3	35	70		33	64	0	0	0	0	0	0	0	10	1	35	100		
Salem.....	1	3	6	9	146	126	272				70	0	0	0	0	0	8	4	2	0	935	1,500	
Somerville*.....	1	(9)	1	2	28	34	62		20.5	52.7	7	7										150	
Southbridge.....	1	1	3	9	12	163	207		134.1	306.7	37	39	32	1	0	0	6	2	2	0	200	1,500	
Springfield.....	1	1	1	2	33	57	90		(80)	80	20	21	7	3			1	4		250	900		
Stoneham.....	1	1	2	3	63															100			
Stoughton*.....	1	(2)	2	2	(196)																		
Taunton*.....	1	(5)	3	5	59	83	196		(122)	192	25	47	23	39	0	0	8	8	3	0	300	600	
Ware.....	1	1	2	4	6	87	105		(161)	164	62	50	43	17	0	0	12	6	11		300	804	
Warren.....	1	1	1	2	3	21	20		17.1	34.2	1						3	1		50	100		
Watertown.....	1	1	3	5	33	60	93		30	82							3	3	1	435	1,500		
Webster.....	1	1	1	2	20	30	50		18	44	15	17	0	0	0	4	3	3	1	0	450	600	
West Springfield.....	1	1	1	2	33	40	73		30	66	27	30	0	0	0	0	4	5	0	0	300		
Westborough.....	1	1	2	3	77																		
Westfield.....	1	2	3	5	45	87	132		37	80	117	8	16	4			5	4	3	125			
Weymouth.....	1	2	5	7	50	125	175		43	116	159	6	30	0	0	0	4	4	4	2	300	500	
Winchester.....	1	1	2	3	24	20	44										0	0	3	1	0		
Woburn.....	1	3	2	5	74	76	150		72	142	25	5				3	10	8				1,000	
Worcester.....	1	9	12	21	514	524	1,038		(655.3)	655.3	(48)					0	(160)		60		2,000	4,000	
MICHIGAN.																							
Adrian.....	1	2	4	6		74	74	148		57	57	114	(125)	10	22		4	2	1		5,000	500	
Ann Arbor.....	1	6	6	12	241	245	586		275	170	445			34	10		85	30	125	120	3,000	2,000	
Battle Creek.....	1	1	1	3	4	58	76	134		49	64	113	12	22	0	0	16	4	0	2	3	8,500	600
Bay City.....	1	1	1	7	71	159	230		44	110	154	18	78	8	9	0	0	0	0	2	4	1,000	1,000
Cadillac.....	1	02	2	4		20	37	57		15	24	39	0	0	0	0	0	0	0	1	0	425	245

366	Grand Island.....	1	3	1	4	25	68	91	21	43	64	10	15	0	0	0	0	1	2	0	0	100	350
367	Hastings.....	1	1	2	3	23	53	76	18	38	56	16	33	19	24	0	0	7	12	0	0	100	150
368	Kearney.....	1	1	2	3	26	36	62	22	29	51	19	21	19	0	0	0	2	5	0	0	250	120
369	Lincoln.....	1	2	4	6	81	93	174	70.8	72.9	143.7	59	61	0	0	0	0	2	5	0	0	250	50
370	Omaha.....	1	6	13	19	169	286	455	136	210	346	88	124	137	142	0	0	22	3	5	0	1,000	3,000
371	Plattsmouth.....	1	2	1	3	42	51	93	38	40	78	40	48	0	0	0	0	0	0	0	100	1,500	
NEVADA.																							
372	Carson City.....	1	1	1	2	39	40	79	(70.3)	70.3	70.3	39	40	2	10	0	0	0	0	0	0	400	200
373	Gold Hill.....	1	1	1	2	43	25	78	40	25	65	43	35	25	40	0	0	0	0	0	0	300	800
374	Virginia City.....	1	1	1	2	25	40	65	22	36	58	40	25	25	40	0	0	0	0	0	0	305	900
NEW HAMPSHIRE.																							
375	Claremont.....	1	1	3	4	47	63	110	(87)	87	87	0	0	22	3	0	0	7	4	7	20	300	400
376	Concord.....	1	1	4	5	94	120	214	74	100	174	0	0	0	0	0	0	10	12	3	0	1,000	500
377	Dover.....	1	1	4	5	47	84	131	(117)	117	117	10	13	0	0	0	0	7	8	0	0	500	395
378	Keene*.....	1	2	4	6	83	100	183	(168)	168	168	0	0	0	0	0	0	37	24	2	0	238	7,000
379	Manchester.....	1	1	4	5	58	64	122	(143)	143	143	24	18	6	19	0	0	3	8	0	0	630	500
380	Nashua.....	1	3	3	6	46	77	123	(115)	115	115	19	26	0	0	0	0	6	3	1	0	156	580
381	Portsmouth.....	1	3	1	4	46	77	123	36	64	100	19	26	0	0	0	0	3	1	1	0	156	580
382	Rochester.....	1	3	1	4	46	77	123	36	64	100	19	26	0	0	0	0	3	1	1	0	156	580
383	Somersworth.....	1	1	2	3	27	39	57	24	24	48	0	0	0	0	0	0	0	0	0	0	0	0
NEW JERSEY.																							
384	Atlantic City*.....	1	(3)	3	3	(51)	51	51													1,118	---	
385	Bayonne.....	1	1	1	1	50	60	110	(122)	122	122	0	0	0	0	0	0	0	0	0	0	155	50
386	Camden.....	0	1	1	1	50	60	110	(122)	122	122	0	0	0	0	0	0	0	0	0	0	155	50
387	Elizabeth.....	1	(5)	5	5	(146)	146	146													0	---	
388	Glorcester*.....	1	(4)	4	4																250	3,000	
389	Harrison.....	0	1	1	1	150	250	400	113	240	389	30	90	92	35	0	30	3			250	3,000	
390	Jersey City.....	1	4	6	10	150	250	400	113	240	389	30	90	92	35	0	30	3			250	3,000	
391	Lambertville.....	1	1	1	1	150	250	400	113	240	389	30	90	92	35	0	30	3			250	3,000	
392	Long Branch*.....	1	(6)	6	6	(160)	160	160													500	---	
393	Millville.....	1	1	2	3	52	32	84	45	28	73	52	32	0	0	0	8	4	5	4	500	200	
394	Montclair.....	1	2	2	4	50	60	110	1	1	1	1	1	1	1	1	1	1	1	1	500	1,000	
395	Morrisville.....	1	1	2	3	21	39	69	20	38	58	14	27	0	0	0	4	4	3	0	400	---	
396	Mount Holly.....	1	1	1	2	7	23	20	6	20	26	7	22	7	23	0	0	0	0	0	40	100	
397	Newark.....	1	7	13	20	329	488	817	(647)	647	647	50	0	189	0	(c)	0	18	4	0	1,500	406	
398	New Brunswick.....	1	1	5	6	(196)	196	196	(151)	151	151	0	0	0	0	0	0	3	1	1	2,815	406	
399	Orange.....	1	2	1	3	32	36	68	26	30	56	7	4	0	0	0	0	3	1	1	366	200	
400	Passaic.....	1	1	(2)	2	(76)	76	76													---	---	
401	Paterson.....	1	2	8	10	(513)	513	513	(543)	543	543	30	3	30	3	0	70	0	0	0	3,000	150	
402	Phillipsburg.....	1	2	1	3	29	56	85	26	40	75	29	56	29	56	4	5	0	1	1	0	323	137
403	Plainfield.....	1	2	1	3	29	56	85	26	40	75	29	56	29	56	4	5	0	1	1	0	323	137
404	Rahway.....	1	1	1	1	29	56	85	26	40	75	29	56	29	56	4	5	0	1	1	0	323	137

* Statistics of 1880-87.

c There is also a high school department for colored pupils, in which 9 boys and 12 girls are enrolled.

b Course of study has a high school department.

c The normal and training school is not connected with the high school. Number of normal pupils 35.

TABLE 24.—Statistics for 1887-88 of Public High Schools in Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Number of such Schools.	Number of Instructors.			Whole Number of Students Enrolled.			Average Daily Attendance.			Number Studying no Language but English.		Number in Commercial Course.		Number in Teachers' Training Course.		Number Preparing for College Classical Course.		Number Preparing for College Scientific Course.		Number of Volumes in Library.	Value of Scientific Apparatus.
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
NEW JERSEY—cont'd.																						
405 Salem	1	1	1	2	26	31	57	65	193	258	19	23	28	100					1		14	\$100
406 Trenton	1	1	9	10	121	245	366				190	242									1,148	380
407 Weehawken																						
NEW YORK.																						
408 Albany	1	8	12	20	259	387	646	(543)		543	(183)										6,400	3,000
409 Albion	1	2	4	6	98	132	230	82	120	202	85	110	25	13	12	22	7	16	5	8	1,327	705
410 Auburn	1	1	4	5	153	225	378	129	189	318	91	125	0	0	0	0	32	7	15	40	595	667
411 Batavia	1	1	3	4									0	0	0	0	5	3	20	25	5,250	900
412 Binghamton	1	1	3	4	111	184	295	69	120	189	10	8					3	2	1	0	6,060	1,700
413 Brooklyn	2	(40)	40	80	571	1,343	1,914	311	802	1,113	23	34	16	19	0	10	40	13	6	10	1,196	3,005
414 Buffalo	1	4	15	19	295	348	644	15	30	45	9	14	0	0	0	0	3	2	2	10	1,703	569
415 Canandaigua	1	3	6	9	20	44	64				11	20	0	0	0	0	3	2	2	2	218	1,050
416 Catskill	1	1	2	3	24	39	63	18	23	41	18	19	0	0	0	0	0	0	0	0	100	250
417 Cohoes	1	1	2	3	20	25	45															
418 Cortland	1	(4)	4		(113)		113														341	
419 Danville	1	1	2	3	47	66	113	30	50	80	40	60			1	8	2	4			1,030	500
420 Dunkirk	1	1	2	3	18	77	95	14	43	63	5	23	0	0	0	0	2	3	4	5	892	2,002
421 Elmira	1	1	2	3	25	69	94	20	40	60	25	36	4	2			4	4	25	36	425	550
422 Elmira	1	1	5	6	84	112	196	82	109	191	6	2	0	0	0	0	2		4	1	900	1,000
423 Elmira	1	(5)	5		(110)		110														2,000	
424 Fushing	1	2	5	7	235	321	556	179	287	466	169	219	42	27			12	4			2,388	400
425 Geneva	1	1	2	3	47	80	127	29	50	79	42	74									2,388	400
426 Gloversville	1	1	2	3																	2,388	400
427 Green Island	1	1	2	3																	344	802
428 Herkimer	1	1	2	3																	176	400
429 Hoosick Falls	1	1	3	4	35	47	82	30	40	70	15	31	0	0	0	0	6	2	4	0	200	1,500
430 Hornellsville	1	1	0	1	43	97	140	30	60	90	20	30					2	2	3	4	5,000	189
431 Hudson	1	1	5	6	96	129	225	80	109	189	25	38	0	0	0	0	2	2	5	2	6,200	189
432 Ithaca	1	1	5	6	96	129	225	80	109	189	25	38	0	0	0	0	2	2	5	2	6,200	189
433 Ithaca	1	1	3	4	169	195	364				129	125	44	18	1	8	4	6	52	12	1,790	1,114

434	Jannica	1	1	9	10	89	120	269	54	76	130	45	43	7	9	9	30	5	2	4	5	2,320	2,437
435	Janestown	1	1	3	3	30	80	110	20	40	69	24	63				27	2	2	4	20	4,667	2,062
436	Kingston	1	1	3	6	79	176	255	(108)		108	50	118								1,246	500	
437	Lansingburg																						
438	Little Falls	1	2	2	4	31	45	76	25	39	64	5	6	2	1	0	0	2			2,150	200	
439	Lockport	1	4	3	7	154	166	320	140	158	298	99	90		0	0	0				1,700	2,500	
440	Long Island City	0							(79)	79											1,450	636	
441	Lyons	1																			3,678	602	
442	Malone	1	1	4	5	65	107	162	48	99	147	35	93	6	7						3,740	553	
443	Medina																				3,835		
444	Middletown *	0	(6)	6	(283)			283															
445	Mount Vernon	0																					
446	New Rochelle	0																					
447	New York	d2																					
448	Newburgh	1	4	4	8	(167)		167	(149)	149		(105)									15,936	1,500	
449	Newburg *	1	(6)	5																	3,835		
450	Ondulenburg *	1	1	3	4	30	50	80	22	33	55	12	32								1,760	1,000	
451	Olean	1	1	4	5	100	122	232	80	83	163	64	88								219	1,941	
452	Oswego	1	2	6	8	131	125	256	100	100	200	84	80		8						4,805	1,941	
453	Owego	1	2	7	9	78	169	247	65	148	213	95	82								1,500	1,043	
454	Penn Yan	1	(3)	3		(85)		85													241		
455	Plattsburg	0																					
456	Port Chester	1	1	2		36	120	156	29	108	137	27	96								3,061	1,808	
457	Port Jervis	1	1	7	3	60	127	187	(150.1)	150.1	150.1	50	84	0	0	0	20	6	3	4	9	15,187	673
458	Poughkeepsie	1	5	13	18	206	431	691	220	380	600	18	159	41	30						1,311	4,238	
459	Radiastor	1	(6)	6		(174)		174	(115)	115		(115)									1,303		
460	Rome *	1	1	4	5	46	98	144													258	968	
461	Saratoga Springs	1	1	4	5	57	88	145	30	15	95	13	18		70	0	0	10	0		1,350	350	
462	Seneca Falls	1	0	1	1	13	18	31	40	15	25	13	13	18							1,080	160	
463	Sing Sing	1	1	4	5	57	88	145	30	15	95	13	18		70	0	0	10	0		1,350	350	
464	Syracuse	1	6	10	16	286	398	654	215	288	503										1,500	13,000	
465	Tarrytown	1	2	0	2	30	39	69	(43.7)	43.7		(63)		(20)							1,300	300	
466	Tonawanda	1	2	0	2	30	39	69													1,100		
467	Troy *	1	(7)	7		(213)		213													1,100		
468	Utica	1	4	4	8	79	122	201	76	95	171	16	38								783	1,635	
469	Watford	1	2	1	3	47	66	113	39	55	94	41	56								4	4	
470	Watertown	1	2	1	3	41	159	100				31	34	3	5						2	8	
471	Watertown	1	2	6	8	101	153	251	(195.6)	195.6		(175)									3	1	
472	West New Brighton *	0																			0	0	
473	White Plains	0																			10	5	
474	Yonkers	1	3	3	6	73	71	144				39	43										
475	Durham	(e)																					
NORTH CAROLINA.																							
476	Durham	(e)																					

* Statistics of 1886-87.

a High school merged into State normal school.

b The schools of the system are designated as primary schools and high schools.

c Advanced pupils go to Troy or Albany.

e The course of study covers nine years, three of which are devoted to the "high school department."

d The public school system of New York City really includes the College of the City of New York, for boys, and the Normal College, for girls, but they are not under the control of the board of education as such. Each of these institutions is under the jurisdiction of a board of trustees consisting of the members of the board of education and the president of the college. Statistics relating to them may be found in Tables 49 and 52 respectively.

NORTH CAROLINA.

504	Irontrout	1	1	1	1	2	41	87	128	39	70	118	0	0	0	0	0	8	1	1	100	500
505	Lancaster	1	1	1	1	2	21	58	79	10.5	45.2	61.7	18	55							400	500
506	Linn*	1	(4)	1	(99)	4			99												300	
507	Mansfield*	1	(4)	4	(162)	4	5	110	162												500	
508	Marietta	1	1	3	4	4	16	34	115	4	83	92									500	
509	Martin's Ferry	1	1	1	2	3	16	83	50	12	24	36	(35)								250	450
510	Massillon *	1	(2)	1	(83)	5			83												800	
511	Middletown*	1	(5)	5	(34)	5	42	78	54	36	65	102	22	38							425	
512	Mount Vernon	1	2	2	4	4	12	30	120	36	65	102	22	38							150	250
513	Nelsonville	1	1	1	5	5	12	30	42	10	25	35	5	10							150	250
514	Norwalk	1	1	1	4	4	40	112	152	32.2	88.5	120.7	2	4							400	400
515	Norwalk	1	0	4	65	113	65	113	173	52	94	146	25	45							500	400
516	Pincesville	1	1	2	41	69	41	69	110	23	53	81									500	100
517	Piqua	1	1	1																		
518	Portsmouth	1	2	1	41	69	41	69	110	36	60	96										
519	Ravenna	1	1	1	23	36	23	36	65	24	30	54	14	18							630	
520	Salem	1	1	2	29	36	29	36	65	24	30	54	14	18							300	
521	Sandusky	1	(2)	4	(90)	4	41	106	147	36	92	128	18	49	0	0	0	0	6	4	9	5
522	Sidney	1	2	2	4	4	41	106	147	36	92	128	18	49	0	0	0	0	6	4	9	5
523	Springfield	1	3	2	42	99	42	99	141	34.5	84.2	118.7									300	500
524	Steuernville	1	2	3	5	46	92	138	141	34.5	84.2	118.7									300	500
525	Tiffin	1	0	3	54	101	46	101	155	42	87	118									1,999	500
526	Toledo	1	4	6	118	245	118	245	363	103	220	323	22	66	0	0	0	0	3	0	3	300
527	Urbana	1	2	1	3	55	74	74	129	44	63	107	40	52	0	0	0	0	12	2	2	1,425
528	Van Wert	1	0	2	18	42	18	42	60												150	
529	Washington C. H.	1	1	1	51	60	51	60	111	39	46	85	30	20	30						75	
530	Wooster*	1	(5)	5	(152)	5	43	80	152	37	71	108									700	
531	Xenia	2	3	2	5	5	43	80	123	37	71	108									400	400
532	Youngstown	1	2	2	63	92	63	92	155	53	72	125	(135)		0	0	0	0			2,500	
533	Zanesville*	1	(6)	6	(179)	6			179													
OREGON.																						
534	Astoria	1	1	3	5	8	83	217	303	67.4	161.4	228.8							0	0	0	50
535	Portland	1	3	5	8	8	83	217	303	67.4	161.4	228.8							0	0	0	60
536	Salem	1	3	5	8	8	83	217	303	67.4	161.4	228.8							0	0	0	200
PENNSYLVANIA.																						
537	Allegheny	1	1	5	6	6	60	61	151	57	90	147	0	0	60	91	0	0			9	500
538	Allentown	2	1	3	4	4	63	83	162	63	76	139	0	0					4		511	50
539	Altoona	1	1	3	4	4	63	83	162	63	76	139	0	0								
540	Ashtabula	1	2	1	3	3	23	36	59	42	72	114										
541	Beaver Falls	1	0	1	1	1	4	17	21	4	16	20	4	17	0	0	0	0	0	0	1,100	150
542	Bellefonte	1	1	3	3	3	35	43	78	29	38	67	23	26	14	21			1	3	200	109
543	Bethlehem	1	1	2	0	2	25	30	55	22	26	48	6	8							100	250
544	Bradford	1	1	2	2	2	25	30	55	22	26	48									125	
545	Bradford	1	1	2	2	2	25	30	55	22	26	48										
546	Bristol	1	0	2	2	2	25	30	55	22	26	48										
547	Butler	1	0	2	2	2	25	30	55	22	26	48									1,000	

* In Bureau Library.

* Statistics for 1883-87.

579	Olyphant.....	1	1	0	1	11	40	51	8	36	44	11	40	4	3	0	0	4	5	20	4	60	30
580	Philadelphia.....	3	31	25	56	934	1,233	2,167	881	1,135	2,076	156	6	68	0	0	0	6	17	7	3,725	4,500	
581	Phoenixville.....	1	1	2	3	20	29	19	19	27	46	8	6	156	56	0	190	17	7	700	300		
582	Pittsburg.....	1	12	12	24	294	367	661	279	350	629	208	318	156	56	0	6	6	7	2,000	5,000		
583	Pittsburg.....	1	1	1	2	16	34	50	14	28	42	14	22	21	0	0	0	0	0	306	306		
584	Plymouth.....	1	1	1	0	14	21	35	12	18	30	14	21	0	0	0	0	0	0	50	50		
585	Pottstown.....	1	1	1	2	45	50	95	12	18	30	45	50	0	0	0	30	1	0	2,000	4,500		
586	Reading.....	2	5	6	11	166	222	388	150	188	338	72	60	40	50	0	0	30	1	0	4,000	4,000	
587	Scranton.....	1	4	2	6	50	183	233	40	145	185	72	60	40	50	0	0	30	1	0	1,708	200	
588	Sharpsburg.....	1	1	2	3	31	40	71	25	32	57	13	13	0	0	0	0	0	0	1,708	200		
589	Steubenville.....	1	2	0	2	32	28	60	23	24	52	1	1	0	0	1	2	2	4	50	400		
590	South Bethlehem.....	1	2	1	3	40	45	85	32	35	67	12	14	5	7	6	7	0	2	0	117	90	
591	South Easton.....	1	1	0	1	25	35	60	30	30	50	25	35	15	20	0	0	0	0	0	100	100	
592	Susquehanna.....	1	1	0	1	43	50	93	38	7	83	25	28	0	0	0	0	0	0	0	50	50	
593	Tamaqua.....	1	2	1	7	35	83	118	22	46	106	19	40	0	0	0	0	2	0	0	200	40	
594	Titusville.....	1	1	1	2	25	48	73	22	46	68	19	40	0	0	0	0	0	0	0	200	40	
595	Tyone.....	1	1	1	2	25	48	73	22	46	68	19	40	0	0	0	0	0	0	0	200	40	
596	Warren.....	1	2	1	3	23	41	64	18	30	48	14	3	10	10	0	0	8	3	0	30	500	
597	Washington.....	(6)	0	2	3	33	43	78	17	36	53	2	1	0	0	0	0	0	0	0	850	175	
598	West Chester.....	1	1	2	3	33	43	78	17	36	53	2	1	0	0	0	0	0	0	0	400	1,000	
599	Wilkes Barre.....	2	5	1	6	48	101	149	43	94	137	1	0	2	1	0	0	0	0	0	2,000	700	
600	Williamsport.....	1	1	3	4	36	71	107	31	50	90	13	24	0	0	0	0	0	0	0	420	500	
601	York.....	1	1	2	3	36	71	107	31	50	90	13	24	0	0	0	0	0	0	0	420	500	
RHODE ISLAND.																							
602	Bristol.....	1	1	1	2	28	29	57	(49, 9)	49, 9	49, 9	16	14	0	0	0	0	0	1	1	200	---	
603	Burrillville.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---	---	
604	Central Falls.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---	---	
605	Cranston.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---	---	
606	Cumberland.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	500	
607	East Providence.....	1	1	2	3	37	72	109	(53)	53	53	18	25	0	0	0	0	15	13	7	600	1,000	
608	Johnston.....	1	1	1	2	22	31	52	11	20	31	18	25	0	0	0	0	0	0	0	470	750	
609	Newport.....	1	3	2	5	58	71	129	50	57	107	0	1	0	0	0	0	3	0	0	1,500	1,500	
610	Pawtucket.....	1	1	2	4	54	67	121	(105)	105	105	104	254	0	0	0	0	20	3	2	1,500	1,500	
611	Providence.....	1	13	14	27	(50)	50	50	26	27	53	3	1	0	0	0	0	1	1	1	1,500	1,500	
612	South Kingstown.....	(2)	2	1	3	28	30	58	26	27	53	3	1	0	0	0	0	15	10	12	921	160	
613	Westerly.....	1	2	1	3	46	71	117	(73)	73	78	11	9	0	0	0	0	0	0	0	921	160	
614	Woonsocket.....	1	2	2	4	46	71	117	(73)	73	78	11	9	0	0	0	0	0	0	0	921	160	
SOUTH CAROLINA.																							
615	Charleston.....	1	0	10	10	0	251	251	0	237	237	0	103	0	0	0	0	0	0	0	0	800	
616	Columbia.....	2	3	3	6	26	42	68	0	0	0	0	0	0	0	0	0	0	0	0	500	---	
617	Greenville.....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---	---	
TENNESSEE.																							
618	Chattanooga.....	2	3	1	4	46	76	122	(97, 7)	97, 7	97, 7	12	25	12	12	12	12	12	3	3	20	---	
619	Clarksville.....	1	0	2	2	17	32	40	12	25	37	12	25	12	12	12	12	12	3	3	500	---	

* There is no regularly organized high school, but in the two highest grades are taught the subjects usually pursued in such schools.

* Statistics of 1886-87.

TABLE 24.—Statistics, for 1887-88, of Public High Schools in Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Number of schools.	Number of Instructors.			Whole Number of Students Enrolled.			Average Daily Attendance.			Number Studying no Language but English.		Number in Commercial Course.		Number in Teachers' Training Course.		Number Preparing for College Classical Course.		Number Preparing for College Scientific Course.		Number of Volumes in Library.	Value of Scientific Apparatus.
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
WISCONSIN—cont'd.																						
680 Stevens' Point*	1	2	1	3	81	92	173	53	63	121	12	28	0	0	6	16	0	0	3	0	2,200	\$400
681 Watertown	1	1	2	3	36	56	92	10	41	73.5	36	56	36	56	1	1	1	1	7	19	580	150
682 Waukesha	1	1	1	2	17	50	67	10	41	51	11	31	0	0	1	1	1	1	7	19	400	150
683 Wausau	1	1	1	2	17	50	67	10	41	51	11	31	0	0	1	1	1	1	7	19	227	500
WYOMING.																						
684 Cheyenne	1	1	2	3	27	30	57	22	23	45	27	30	0	0	0	0	0	0	0	0	1,000	500

* Statistics of 1886-87.

Cities and Towns containing 4,000 Inhabitants and over from which no Statistics have been received.

City or Town.	State.	City or Town.	State.
Anniston	Alabama.	Frostburg	Maryland.
Gadsden	Alabama.	Lonaconing	Maryland.
Huntsville	Alabama.	Andover	Massachusetts.
Tombstone	Arizona.	Barnstable	Massachusetts.
Eureka Springs	Arkansas.	Canton	Massachusetts.
Alameda	California.	Deerfield	Massachusetts.
Bodie	California.	Gardiner	Massachusetts.
Chico	California.	Grafton	Massachusetts.
Eureka	California.	Ipswich	Massachusetts.
Grass Valley	California.	Medway	Massachusetts.
Napa City	California.	Natick	Massachusetts.
Nevada	California.	Palmer	Massachusetts.
San Diego	California.	Provincetown	Massachusetts.
Santa Barbara	California.	Quincy	Massachusetts.
Stockton	California.	Salisbury	Massachusetts.
Visalia	California.	South Hadley	Massachusetts.
Colorado Springs	Colorado.	Spencer	Massachusetts.
Denver	Colorado.	Ware	Massachusetts.
Fort Collins	Colorado.	West Gardner	Massachusetts.
Ansonia	Connecticut.	Big Rapids	Michigan.
Danbury	Connecticut.	Ishpeming	Michigan.
Danielsonville	Connecticut.	Lansing	Michigan.
Groton	Connecticut.	Mount Clemens	Michigan.
Newtown	Connecticut.	Muskegon	Michigan.
South Manchester	Connecticut.	Owosso	Michigan.
South Norwalk	Connecticut.	Fergus Falls	Minnesota.
Southington	Connecticut.	Rochester	Minnesota.
Stonington	Connecticut.	Columbus	Mississippi.
Thompsonville	Connecticut.	Boonville	Missouri.
Waterbury	Connecticut.	Brookfield	Missouri.
Williamantic	Connecticut.	Cape Girardeau	Missouri.
Winchester	Connecticut.	Joplin	Missouri.
Windham	Connecticut.	Lamar	Missouri.
Woodstock	Connecticut.	Trenton	Missouri.
Deadwood	Dakota.	Warrensburg	Missouri.
Grand Forks	Dakota.	Nebraska City	Nebraska.
Dover	Delaware.	Eureka	Nevada.
Fernandina	Florida.	Suncook	New Hampshire.
Jacksonville	Florida.	Bordentown	New Jersey.
Oriando	Florida.	Bridgeton	New Jersey.
Tallahassee	Florida.	Burlington	New Jersey.
Tampa	Florida.	Flemington	New Jersey.
Brunswick	Georgia.	Hackensack	New Jersey.
Griffin	Georgia.	Hoboken	New Jersey.
Milledgeville	Georgia.	Perth Amboy	New Jersey.
Thomasville	Georgia.	Santa Fé	New Mexico.
Boisé City	Idaho.	Amsterdam	New York.
Alton	Illinois.	Bath	New York.
Braidwood	Illinois.	Brockport	New York.
Carlinville	Illinois.	Chateaugay	New York.
Champaign	Illinois.	College Point	New York.
Collinsville	Illinois.	Fulton	New York.
Dixon	Illinois.	Goshen	New York.
Englewood	Illinois.	Haverstraw	New York.
Geneseo	Illinois.	Matteawan	New York.
Mattoon	Illinois.	New Brighton	New York.
Murphysborough	Illinois.	Niagara Falls	New York.
Pekin	Illinois.	Norwich	New York.
Aurora	Indiana.	Nyack	New York.
La Fayette	Indiana.	Oneida	New York.
Madison	Indiana.	Peekskill	New York.
Cedar Rapids	Iowa.	Rondout	New York.
Clinton	Iowa.	Salamanca	New York.
Fort Madison	Iowa.	Saugerties	New York.
Le Mars	Iowa.	Sebenectady	New York.
Wellington	Kansas.	Stapleton	New York.
Ashland	Kentucky.	Ticonderoga	New York.
Catlettsburg	Kentucky.	Wappinger's Falls	New York.
Frankfort	Kentucky.	Waverly	New York.
Henderson	Kentucky.	West Troy	New York.
Maysville	Kentucky.	Whitehall	New York.
Mount Sterling	Kentucky.	Asheville	North Carolina.
Winchester	Kentucky.	Charlotte	North Carolina.
Shreveport	Louisiana.	Wilmington	North Carolina.
Belfast	Maine.	Delaware	Ohio.
Brunswick	Maine.	Franklin	Ohio.
Camden	Maine.	Greenville	Ohio.
Ellsworth	Maine.	Kenton	Ohio.
Annapolis	Maryland.	Marion	Ohio.
Cumberland	Maryland.	Pomeroy	Ohio.

Cities and Towns containing 4,000 Inhabitants and over from which no Statistics have been received—Continued.

City or Town.	State.	City or Town.	State.
Shelby.....	Ohio.	Lincoln.....	Rhode Island.
Troy.....	Ohio.	Warwick.....	Rhode Island.
Warren.....	Ohio.	Beaufort.....	South Carolina.
Albany.....	Oregon.	Columbia.....	Tennessee.
Athens.....	Pennsylvania.	Murfreesborough.....	Tennessee.
Bloomsburg.....	Pennsylvania.	Nashville.....	Tennessee.
Catasauqua.....	Pennsylvania.	Colorado.....	Texas.
Connellsville.....	Pennsylvania.	Dallas.....	Texas.
Franklin.....	Pennsylvania.	Marshall.....	Texas.
Girardville.....	Pennsylvania.	San Antonio.....	Texas.
Greensburg.....	Pennsylvania.	Salt Lake City.....	Utah.
Huntingdon.....	Pennsylvania.	Burlington.....	Vermont.
Mansfield Valley.....	Pennsylvania.	Colchester.....	Vermont.
Marietta.....	Pennsylvania.	St. Albans.....	Vermont.
Mauch Chunk.....	Pennsylvania.	Charlottesville.....	Virginia.
Mechanicsburg.....	Pennsylvania.	Danville.....	Virginia.
Middletown.....	Pennsylvania.	Manchester.....	Virginia.
Pottsville.....	Pennsylvania.	Portsmouth.....	Virginia.
Reno.....	Pennsylvania.	Roanoke.....	Virginia.
Reynoldsville.....	Pennsylvania.	Seattle.....	Washington.
St. Clair.....	Pennsylvania.	Ashland.....	Wisconsin.
Shamokin.....	Pennsylvania.	Beaver Dam.....	Wisconsin.
Sharon.....	Pennsylvania.	Eau Claire.....	Wisconsin.
Steelton.....	Pennsylvania.	Manitowoc.....	Wisconsin.
Sunbury.....	Pennsylvania.	Martnette.....	Wisconsin.
Towanda.....	Pennsylvania.	Menasha.....	Wisconsin.
Uniontown.....	Pennsylvania.	White Water.....	Wisconsin.
Waynesburg.....	Pennsylvania.		

Cities from which Statistics of 1887-88 were Received too Late for Publication.

City.	State.	City.	State.
Oakland α.....	California.	Chillicothe α.....	Missouri.
Parsons α.....	Kansas.	Hamilton α.....	Ohio.
Alpena.....	Michigan.		

α Statistics of 1886-87 used in the tables.

THE TABLE OF COMPARATIVE STATISTICS OF ENROLMENT, ATTENDANCE, ETC.

The ratios and averages presented in this Table reveal facts which would be apt to escape attention in an examination of the usual tables of absolute statistics. In every column are many ratios that immediately arrest the attention because of their astonishing superiority over those of other cities in which the popular interest in education is supposed to be greater. While some of these startling differences may be explained by the assumption that the unusually large percentages are due to the existence of errors, it is not always safe to dismiss their consideration upon such grounds. A careful examination of this Table, and that following next but one, will show that more than one school system bear reputations for excellence based less upon results actually accomplished than upon the high esteem in which the abilities of the principal officers of such systems are held by the members of the profession generally; and that many cities whose schools have scarcely received respectful consideration in the pedagogical world have more reason to boast of their educational achievements than have some of the supposed leaders in popular education.

Ratio of total public and private school enrolment to population six to fourteen.—Without venturing an explanation, and without the expression of an opinion as to the accuracy of the statements from which the ratios were made, attention is called to the fact that in Union City, Ind.; Flint, Mich.; Wooster, Ohio; Braddock, Pa.; Austin, Tex.; Tacoma and Walla Walla, Wash., the total enrolment in public and private schools is twice as large (over two hundred per cent.) as the population six to fourteen. In all these places the population four to twenty-one is much less than the reported enrolment. A considerable number of other cities show total enrolments abnormally large when compared to their population, but in no other than those mentioned is the percentage greater than two hundred.

As to the inferences to be drawn from these ratios, it must first be said that if entirely correct they show that the schools of those cities are of such marvellous efficiency and attractiveness as to draw into them not only the entire minor population over four years old, but many others, either from other localities or from the adult inhabitants. Among the disturbing elements that sometimes lead to discrepancies in the returns of these items may be mentioned the presence of institutions of superior grade whose students are erroneously included in "the number of pupils in private and parochial schools;" failure to exclude duplicate enrolments; an imperfect and carelessly taken school census.

Ratio of public school enrolment to population six to fourteen.—Those cities in which the enrolment in public schools exceeds the population six to fourteen have done praiseworthy educational work. Those in which the public school enrolment is greater by fifty per cent. than the population six to fourteen should receive especial consideration at the hands of school officers of other cities. The methods by which they secure an object so greatly to be desired should be made known to all, that they might be widely copied—provided the flattering showing is not the result of a very defective census. The following are the cities in which the percentage of public school enrolment to population six to fourteen exceeds one hundred and fifty: Aspen, Colo.; Atlantic, Boone, Oskaloosa, and Ottumwa, Iowa; Hutchinson and Independence, Kans.; Calais, Me.; Framingham, Northbridge, and West Springfield, Mass.; Coldwater, Flint, Ludington, Pontiac, and West Bay City, Mich.; Duluth, Minn.; Corning, Hoosick Falls, Ilion, Medina, and Saratoga Springs, N. Y.; Braddock, Honesdale, and Milton, Pa.; Tacoma and Walla Walla, Wash.; Baraboo and Monroe, Wis.

Ratio of private school enrolment to total public and private school enrolment.—In thirty-nine cities and towns there are no private or parochial schools. It is to the credit of the public schools in these places that their accommodations and instruction are such that no private establishments can exist in their vicinity; but it will be observed that with three exceptions, viz., New London, Conn., Auburn, Me., and Medford, Mass., all are cities and towns of the sixth or the smallest class admitted to these tables. Private schools are not without a certain value, and it is not reasonable to hope that they will be entirely displaced, especially in the larger cities. It is not a favorable indication, however, to observe an undue proportion of the children enrolled in schools of a private character. In fifty-four cities the private school enrolment amounts to more than one-third (33.3 per cent.) of the total public and private school enrolment.

Ratio of average daily attendance to population six to fourteen.—The ratio of average daily attendance to the population six to fourteen for the United States is 65.8 per cent. In eighty-two cities this percentage is over one hundred. In other words, the average daily attendance in the public schools is greater than the population six to fourteen. A great many of these cities are in States in which the school fund is divided upon the basis of school population, and it is presumable that in them the census is at least fairly complete. In the matter of public school attendance, therefore, the eighty-two cities mentioned deserve especial praise.

Ratio of average attendance to enrolment.—It will be seen that the ratio of average attendance to total public school enrolment is usually between 65 per cent. and 75 per cent. Noteworthy regularity on the part of those enrolled is indicated by an average attendance that approaches or exceeds three-fourths (75 per cent.) of the total enrolment. The percentages that mount high in the nineties, however, may be looked upon with suspicion. The items from which they were calculated were in all probability not obtained by the methods described at the beginning of this chapter. In twenty-seven cities the average number of days which each enrolled pupil attended school during the year was less than one hundred, and in four cities the average was less than eighty days or four school months. On the other hand, the average exceeds one hundred and sixty days, or eight school months, in forty-six cities.

Column 8 offers a favorable opportunity for comparing the public school work done in the several cities. All are placed upon the same basis. The "total attendance in days" shows the whole amount of instruction imparted, and the quotient obtained by dividing this quantity by the population six to fourteen represents the proportion of the attendance to the population of the usual age for school attendance.

The average number of pupils in attendance to each teacher is a widely varying quantity. In Saco, Me., the average is 12; in New Milford, Conn., 20.3; in Talladega, Ala., 21.1. In Mobile, Ala., the number is 60; in Jackson, Tenn., 61.2; in Jackson, Miss., 91.7; and in Stevens' Point, Wis., it is no less than 92.6. All these instances are exceptional, however, as it will be seen that in but few cases is the average less than 30 or more than 50.

Proportion of male teachers.—The smallest proportion of male teachers reported by any large city is that at Wilmington, Del., where there is but one male in a force of one hundred and sixty-four teachers. Fourteen of the smaller cities employ only female teachers.

Accommodations.—The relative sufficiency of accommodations, so far as quantity is concerned, is shown by Columns 10 and 11, though no ratio which it is practicable to use in these tables can show whether any city provides all the accommodations needed for the proper prosecution of its school work. The average seating capacity of buildings is shown by Column 13.

High schools.—The only universally recognized division of the common school course of study is that into high and elementary schools. It would be interesting and profitable to know what proportion of the whole number of pupils are enrolled in the different grades of schools, but the differences in organization are such that it is possible only to show the proportion that reach the high school.

As would naturally be supposed, the attendance of pupils enrolled in high schools is much more regular than the attendance of the younger pupils in almost every city represented in the Table; but it will probably be surprising to many high school teachers of long experience to note so many percentages over 95, and to observe that in one case (Auburn, Me.) the average attendance is 98.8 per cent. of the total enrolment for the year.

Comparison with summarized statistics.—The value of this Table will be greatly enhanced by frequent reference to and comparison with similar ratios in the Table of summaries (Table 26). Intelligent comparison with statistics of other systems and with the summarized statistics of States, divisions, and classes can not fail to be profitable.

TABLE 25.—Comparative Statistics, for 1887-88, of Enrolment, Attendance, Teachers, and Sitings in Common Schools of Cities and Towns containing over 4,000 Inhabitants.

City or Town.	High Schools.															
	Ratio of Total Public and Private School Enrollment to Population 6-14.		Ratio of Public School Enrollment to Population 6-14.	Ratio of Average Attendance to—		Average Number Days Attended of Each Person Enrolled.	Total Attendance is Equivalent to Attendance between 6 and 14 for—	Number of Pupils in Average Attendance to Each Teacher.	Ratio of Male Teachers to Whole Number of Teachers.	Number of Sitings to—		Average Number of Sittings to a Building.	Ratio of Enrollment to—			Ratio of Average Attendance to Bureau.
	Private School Enrollment	Public School Enrollment		Population 6-14.	Enrollment.					Each 100 Pupils Enrolled.	Each 100 Pupils in Average Attendance.		Total Public School Enrollment.	Population 6-14.	Per cent.		Per cent.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
ALABAMA.																
1 Birmingham.....	Per cent. 113.3	Per cent. 99.4	Per cent. 12.2	Per cent. 65.7	Per cent. 66.1	116.5	Days 115.8	26.9	Per cent. 9.4	83.4	105.2	260.7	4.4	4.4	53.8	
2 DuFala.....	79.9	42.8	46.4	27.6	64.5	114.1	48.8	44.6	40.0	86.7	124.5	150.0	.....	.....	.....
3 Lively.....	40.7	29.0	28.6	23.7	81.6	97.9	38.4	20.1	28.6	200.0	245.1	250.0	.....	.....	.....
4 Mobile.....	.....	.....	.....	51.1	.....	.....	30.0	60.0	17.6	110.7	123.7	323.0	.....	.....	95.2
5 Montgomery.....	61.5	.....	.....	53.1	89.5	147.7	90.9	36.8	13.9	136.4	136.4	430.5	.....	.....	93.8
6 Selma.....	54.1	.....	.....	38.3	70.8	120.4	65.1	33.2	21.1	138.9	236.8	223.0	.....	.....	.....
7 Talladega.....	153.8	121.3	23.6	68.8	58.6	104.7	127.5	21.1	22.2	81.0	124.7	137.5	5.3	2.8	.....
8 Tuscaloosa.....	52.7	.....	.....	34.3	63.0	101.6	54.3	31.5	28.6	.....	.....	.....	.....	.....	.....
ARIZONA.																
9 Tucson.....	.....	.....	22.1	.....	54.0	97.0	.....	25.9	9.1	132.6	245.6	233.3	4.0	.....	.....
ARKANSAS.																
10 Fort Smith.....	123.0	.....	.....	77.6	61.6	117.0	147.5	47.7	22.7	92.1	167.3	160.0	5.7	7.2	.....
11 Helena.....	50.1	.....	22.4	27.6	55.1	92.0	46.1	35.1	25.0	83.6	117.5	190.0	5.2	2.6	74.1
12 Hot Springs.....	92.0	.....	.....	65.5	71.2	.....	.....	.....	.....	88.9	131.7	231.6	.....	.....	.....
13 Little Rock.....	76.3	.....	15.7	51.5	67.5	117.1	89.3	44.4	7.5	117.5	214.4	500.0	3.6	2.7	90.4
14 Pine Bluff.....	142.9	110.5	22.7	60.2	59.6	93.2	108.5	40.4	15.0	117.5	214.4	500.0	.....	.....	.....
15 Texarkana.....	104.8	100.4	4.2	87.9	89.6	143.3	143.9	41.9	26.7	114.1	127.4	266.7	0	0	.....
CALIFORNIA.																
16 Los Angeles.....	112.4	98.3	12.5	60.1	61.2	107.5	105.6	35.9	7.2	53.9	83.1	208.2	1.2	1.2	94.4	

* Statistics of 1886-87.

TABLE 25.—Comparative Statistics, for 1887-88, of Enrollment, Attendance, Teachers, and Sitings in Common Schools, etc.—Continued.

City or Town.	Ratio of Total Public and Private School Enrollment to Population 6-14.		Ratio of Private School Enrollment to Total Public and Private Enrollment.		Ratio of Average Attendance to—		Average Number Days Attendance of Each Person Enrolled.	Total Attendance is Equivalent to Attendance of Each Person between 6 and 14 for—	Number of Pupils in Average Attendance to Each Teacher.	Ratio of Male Teachers to Whole Number of Teachers.	Number of Sitings to—		Average Number of Sitings to a Building.	High Schools.		
	Ratio of Total Public and Private School Enrollment to Population 6-14.	Per cent.	Ratio of Private School Enrollment to Total Public and Private Enrollment.	Per cent.	Population 6-14.	Enrollment.					Each 100 Pupils Enrolled.	Each 100 Pupils in Average Attendance.		Ratio of Enrollment to—	Population 6-14.	Ratio of Average Attendance to Enrollment.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Per cent.
CALIFORNIA—cont'd.																
17 Marysville.....	109.1	82.6	24.3	59.0	71.5	125.1	103.3	35.5	20.0	110.8	155.2	275.0	4.4	3.7	.....	.....
18 Oakland.....	124.7	107.7	13.6	76.8	71.3	145.5	156.8	32.9	8.0	84.1	117.9	500.0	4.8	5.2	.....	.....
19 Sacramento.....	118.0	94.3	20.1	64.1	68.0	129.0	121.6	30.0	5.6	88.1	129.5	291.7	2.9	2.8	.....	64.9
20 San Francisco.....	88.2	73.2	16.3	54.6	74.6	149.9	109.7	38.2	6.0	.....	.....	.....	2.8	2.0	.....	81.5
21 San José.....	137.5	111.8	18.7	72.8	65.1	129.8	145.1	41.8	14.6	67.9	104.3	418.2	3.6	4.1	.....	.....
22 Santa Cruz.....	151.2	128.6	16.9	86.1	68.5	128.7	161.8	38.3	13.6	101.6	148.3	250.0	4.9	6.1	.....	73.3
23 Santa Rosa.....	138.3	100.1	20.6	67.1	61.5	116.3	126.9	36.3	10.5	83.8	136.2	313.3	6.6	7.2	.....	89.2
24 Vallecito.....	.....	.....	.....	.....	.....	.....	.....	.....	21.1	100.6	135.4	253.3	0	0	.....	95.4
25 Woodland.....	.....	.....	22.3	.....	74.3	128.3	.....	36.9	14.3	.....	.....	.....	.....	.....	.....	.....
COLORADO.																
26 Aspen.....	183.4	183.4	0	107.0	58.3	98.0	179.8	33.8	11.1	86.4	148.0	225.0	4.8	8.8	.....	84.0
27 Leadville.....	180.7	128.0	23.1	80.0	62.5	96.9	124.0	39.9	15.8	123.6	197.6	375.0	2.6	3.3	.....	80.7
28 Pueblo.....	.....	144.3	.....	79.8	53.3	95.4	142.0	28.0	19.0	84.5	152.8	300.0	4.9	7.0	.....	.....
CONNECTICUT.																
29 Bridgeport*.....	128.4	115.5	10.0	84.3	73.0	.....	.....	40.6	3.2	90.5	124.1	349.6	.....	.....	.....	.....
30 Bristol.....	.....	142.0	.....	92.7	65.1	114.0	102.1	29.7	10.7	105.7	161.9	110.1	8.8	12.5	.....	61.8
31 Derby.....	.....	129.3	.....	77.5	60.0	.....	.....	32.8	12.1	86.6	144.4	305.6	.....	.....	.....	.....
32 East Hartford.....	158.2	153.1	10.3	83.1	57.5	103.6	158.5	26.0	15.0	89.9	156.3	62.4	6.1	9.3	.....	68.4
33 Euclid*.....	138.4	95.0	31.4	65.1	68.5	.....	.....	25.5	10.0	119.7	174.9	80.1	0	0	.....	.....
34 Greenwich.....	121.9	98.4	19.3	54.2	58.1	106.8	105.1	23.6	13.3	148.1	268.9	91.3	0	0	.....	.....
35 Hartford.....	122.5	116.2	5.1	78.8	67.8	.....	.....	29.0	15.3	93.3	137.5	407.4	8.9	10.4	.....	72.9
36 Killingly*.....	.....	117.9	.....	.....	.....	.....	.....	18.2	7.7	83.5	130.8	80.0	4.8	5.7	.....	.....
37 Manchester.....	131.5	128.7	2.2	77.5	60.2	112.4	144.6	35.2	10.0	82.3	136.8	138.9	.....	.....	.....	.....
38 Meriden.....	140.9	116.7	20.7	78.1	67.0	134.0	156.3	34.3	.....	90.2	134.7	264.3	6.0	7.0	.....	75.1

39	Middletown.....	152.6	100.8	34.0	72.2	71.6	115.2	102.4	29.0	16.7	108.0	150.9	350.0	8.8	8.9	95.3
40	Naugatuck.....	146.8	141.0	4.0	81.2	57.6	141.7	102.4	28.5	14.3	183.8	145.6	96.9	.....	.....	.....
41	New Britain.....	132.8	129.3	12.5	57.4	74.6	139.8	168.2	33.8	7.0	106.4	145.3	231.5	9.0	6.9	90.3
42	New Haven.....	137.6	125.8	0	84.1	69.9	150.6	189.5	32.1	6.8	84.5	121.0	325.9	4.4	5.3	.....
43	New London.....	125.8	120.3	3.0	96.7	76.9	139.8	168.2	35.1	4.5	.....	.....	.....	.....	.....	.....
44	New Milford.....	155.4	150.7	27.8	79.5	52.7	96.5	145.4	20.3	52.4	93.6	177.5	42.1	21.6	32.6	77.1
45	Norwich.....	143.7	103.7	.....	77.2	74.4	141.4	146.6	24.1	9.0	117.2	157.4	202.5	.....	.....	.....
46	Plainfield.....	135.3	135.3	.....	72.0	53.2	93.1	126.0	32.0	.....	107.1	201.3	87.6	.....	.....	.....
47	Portland*.....	125.7	123.8	1.5	89.3	72.1	144.2	178.5	22.6	10.5	123.0	170.7	125.0	.....	.....	.....
48	Putnam.....	116.7	61.5	47.3	42.7	69.5	125.1	76.9	26.0	35.4	38.9	.....	70.0	10.4	6.4	75.8
49	Rockville.....	.....	.....	14.3	.....	.....	.....	.....	.....	6.7	128.7	234.2	55.6	.....	.....	.....
50	Stafford*.....	137.3	110.5	19.5	60.7	55.0	.....	.....	.....	16.0	97.1	.....	.....	.....	.....	.....
51	Stamford*.....	.....	96.2	.....	.....	.....	.....	.....	.....	9.3	87.2	136.3	199.6	.....	.....	.....
52	Stratford.....	138.8	136.3	1.8	87.2	64.0	128.0	174.4	33.3	13.6	99.1	138.9	78.1	7.9	10.2	72.0
53	Thomaston.....	130.2	128.2	1.6	91.4	71.3	144.2	184.9	30.0	13.3	87.2	211.6	70.0	.....	.....	.....
54	Thompson.....	174.5	120.0	31.3	46.9	39.1	.....	.....	23.9	27.7	82.8	132.7	96.0	4.4	6.3	87.5
55	Torrington.....	142.6	140.6	0	82.4	56.4	115.5	101.8	30.0	9.5	88.0	.....	.....	5.7	7.9	.....
56	Wallingford.....	.....	138.0	.....	.....	.....	.....	.....	.....	5.0	114.7	.....	200.0	.....	.....	.....
DAKOTA.																
57	Fargo.....	138.6	130.7	5.7	.....	.....	.....	.....	.....	4.3	104.0	.....	242.0	5.6	7.3	81.5
58	Sioux Falls.....	130.0	121.9	6.2	.....	.....	.....	.....	.....	4.8	.....	.....	.....	5.5	6.7	.....
DELAWARE.																
59	New Castle.....	134.2	121.7	9.3	82.3	67.6	139.3	169.5	36.7	11.1	94.5	139.7	153.7	.....	.....	75.9
60	Wilmington.....	.....	.....	.....	.....	66.7	130.3	.....	35.4	0.6	86.5	129.4	313.2	2.9	.....	.....
DISTRICT OF COLUMBIA.																
61	Washington.....	104.2	95.6	8.2	72.8	76.1	139.4	133.3	42.7	9.7	87.9	115.6	340.6	3.9	3.7	84.3
FLORIDA.																
62	Gainesville.....	.....	.....	18.5	.....	65.8	72.4	.....	48.5	33.3	124.4	189.0	366.7	.....	.....	.....
63	Key West*.....	.....	.....	38.1	.....	74.1	88.9	.....	32.1	26.7	123.3	166.3	400.0	3.7	.....	.....
64	Palm Beach.....	.....	.....	19.1	.....	70.5	93.1	.....	31.0	50.0	.....	.....	.....	15.6	.....	86.7
65	Pensacola.....	88.8	71.4	19.6	54.0	75.6	109.6	78.3	44.3	13.0	121.7	160.9	250.0	.....	.....	.....
GEORGIA.																
66	Americus.....	.....	97.0	10.7	76.3	78.7	145.5	141.1	42.5	23.5	93.5	145.3	312.5	4.2	4.1	92.3
67	Athens.....	.....	.....	.....	.....	68.5	124.7	.....	31.4	20.0	.....	.....	.....	.....	.....	.....
68	Atlanta.....	89.5	73.7	17.6	69.3	94.0	189.0	138.5	57.2	10.4	94.2	100.3	507.7	7.5	5.6	.....
69	Augusta.....	76.7	44.0	37.1	26.4	54.7	95.2	45.9	37.1	8.0	76.9	140.7	217.5	5.0	2.4	82.8
70	Columbus.....	.....	69.4	.....	52.7	75.9	150.4	104.3	40.4	12.5	84.4	111.1	209.3	.....	.....	.....
71	Macon.....	62.5	50.8	18.8	40.1	79.0	141.5	73.3	34.1	10.0	69.1	110.1	214.3	11.2	5.6	84.0
72	Rome*.....	85.2	64.1	24.8	58.6	81.8	156.3	100.2	36.1	12.5	138.3	151.3	174.8	0	0	.....
73	Savannah.....	79.5	63.0	20.8	51.5	.....	155.4	97.8	54.7	14.0	94.8	118.7	411.1	.....	.....	.....

* Statistics of 1896-97.

TABLE 25.—Comparative Statistics, for 1887-88, of Enrolment, Attendance, Teachers, and Sittings in Common Schools, etc.—Continued.

City or Town.	High Schools.																
	Ratio of Total Public and Private School Enrolment to Population 6-14.	Ratio of Public School Enrolment to Population 6-14.	Ratio of Private School Enrolment to Total Public Enrolment.	Ratio of Average Attendance to—		Average Number Days Attended of Each Person Enrolled.	Total Attendance is Equivalent to— Each Person between 6 and 14 years.	Number of Pupils in Average Attendance to Each Teacher.	Ratio of Male Teachers to Whole Number of Teachers.	Number of Sit- tings to —			Average Number of Sittings to a Building.	Ratio of Enrol- ment to—		Ratio of Average At- tendance to Enrol- ment.	
				Population 6-14.	Enrolment.					Each 100 Pupils Enrolled.	Each 100 Pupils in Average Attendance.	Total Public School Enrolment.		Population 6-14.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
ILLINOIS.																	
74 Aurora	Per cent. 124.7	Per cent. 100.2	Per cent. 19.6	Per cent. 72.6	Per cent. 72.5	139.9	140.2	35.5	Per cent. 8.3	91.3	126.0	358.3	Per cent. 4.8	Per cent. 4.9	Per cent. 90.7		
75 Beardstown	135.3	99.0	23.8	71.8	72.5	142.9	141.4	33.9	14.3	91.0	126.2	150.0	6.1	6.0	82.5		
76 Belleville	118.6	85.9	27.6	73.8	86.0	171.3	147.0	43.3	25.0	103.5	120.4	416.7					
77 Pelevideo	141.5	130.7	7.6						12.5								
78 Bloomington		91.5		67.8	74.0	131.0	119.9	32.7	2.6	85.4	115.4	263.7	6.0	5.5	84.6		
79 Cairo	101.9	81.8	19.7	57.8	70.7	113.1	92.5	43.8	8.3	77.0	135.2	143.1	3.9	3.2	91.0		
80 Canton		99.4		74.1	74.4	133.9	133.4	34.3	4.3	100.6	135.2	213.0	4.3	4.3	82.6		
81 Centralia			6.0		71.6	118.3	41.2	15.8	4.3	73.2	102.2	200.0	8.1		67.0		
82 Chicago	126.7	79.6	37.2	59.4	74.6	145.6	115.9	39.9	4.3	91.9	123.2	840.4	2.6	2.0	83.7		
83 Duquoin		103.1		74.0	74.6	141.7	146.2	36.9	14.6	109.5	132.6	385.7	4.7	4.9	73.6		
84 Decatur			12.4		76.0	134.5		48.7	11.4	93.9	123.5	331.3	10.4		81.0		
85 East St. Louis*	98.2	95.9	2.4	85.5	89.5	179.1	171.7	42.0	34.1	58.5	111.1	250.0	8.0	5.2	77.8		
86 Effingham	105.4	65.1	38.3	51.8	79.5	159.3	103.7	56.3	37.5	94.4	125.4	190.1	5.9	6.4	81.6		
87 Elgin	140.4	108.4	22.8	81.6	75.3	143.0	155.0	36.3	6.5	93.1	119.0	365.0					
88 Evanston		102.8		80.4	78.2	149.4	153.6	34.9	4.5	114.9	137.9	260.0	9.3	8.1	92.1		
89 Freeport	104.3	87.5	16.1	63.7	72.8	142.6	124.9	32.6	8.6	105.2	161.5	260.0	10.0	8.2			
90 Geneva	119.9	81.3	31.3	53.2	65.1	126.3	103.3			100.6	135.3	263.7	6.3	4.0	83.7		
91 Galesburg	96.7	78.4	19.0	58.3	74.3	130.1	101.9	37.8	4.8	117.3	135.3	263.7	9.1	7.1			
92 Jacksonville	85.7	63.4	26.0	47.9	75.5	128.8	82.8	33.9	25.0	105.8	110.9	261.7	17.5	20.7	92.5		
93 Jerseyville	127.4	117.9	7.5	112.4	95.4	167.9	197.9	95.0	5.4	85.9	128.5	245.0	5.3	3.8	74.0		
94 Joliet	95.9	72.9	24.0	48.7	66.8	130.7	130.7	34.1	9.1	129.7	153.3	287.5	3.9	2.8	69.1		
95 Kankakee	114.1	70.9	49.8	49.8	70.2	132.6	94.0	34.1	13.0	107.2	123.2	200.0	7.4	2.6	75.8		
96 La Salle	61.0	34.9	42.7	28.8	82.3	164.6	57.5	40.0	9.5	84.1	116.8	196.2	6.1	4.4	83.1		
97 Lincoln	96.9	72.2	25.6	51.9	72.0	131.2	94.7	45.6	11.8	82.1	122.7	476.0	8.6	10.2	72.0		
98 Litchfield	143.1	117.8	17.7	73.8	66.9	113.1	133.5	43.6	20.0	87.9	108.3	336.0	6.9	9.6			
99 Mendota*	142.6	132.8	6.9	107.8	81.2	143.5	190.5	49.5	20.0	92.3	119.8	309.5	4.7	4.0			
100 Moline		112.8		83.8	77.0	134.7	151.9	36.9	9.5	92.3	111.6						
101 Monmouth	137.5		0	124.9	92.9	142.6	190.2	47.7	0	101.6	111.6	275.0					

102	Olney	141.4	141.4	0	101.6	71.9	130.1	183.9	47.7	23.5	74.6	103.8	842.0	6.3	8.9	82.5
103	Ottawa	88.7	88.7		95.8	83.0	153.3	135.9	40.5	6.5	99.1	119.4	214.3	16.8	14.9	
104	Paris*	155.3	147.4	5.1	95.8	65.0	119.6	176.5	32.7	4.5	81.3	125.0	200.0	9.5	14.0	
105	Peoria*	120.4	98.2	18.4			134.7	132.3		7.3	78.5		401.1	4.5	4.5	
106	Peru			28.0						15.8	86.2		194.0	7.1		
107	Pullman			0		61.5	119.7		38.1	0	84.6	137.5	275.0			
108	Quincy	105.1	65.8	36.4	41.5	62.3	121.8	81.4	37.6	4.8	87.5	137.5		2.3		84.0
109	Rock Island		102.7		79.5	78.1	138.2	140.7	36.4	8.5	93.4	119.6	256.2	6.2		83.8
110	Rockford	108.6	101.8	5.4	77.5	75.5	144.2	148.1	33.7	5.1	89.8	119.0	240.6	5.8	0.0	85.3
111	Springfield	124.4	77.1	38.0	63.0	81.6	146.9	113.3	34.6	10.4	98.4	129.6	291.8	8.3	6.4	86.9
112	Springfield (Dist. No. 3)	147.8	135.1	8.9	108.0	89.0	151.1	204.2	34.0	6.7	98.0	122.3	312.5	9.6	12.9	91.3
113	Stratford*	133.1	108.9	18.2	77.0	70.7	141.4	153.9	45.3	3.1	92.6	130.9	271.4			
114	Waukegan*	80.2	74.1	7.6	71.6	96.5	192.1	143.1	35.2	15.0	113.0	117.1	275.0	11.2	8.3	
INDIANA.																
115	Anderson	124.1	104.0	16.3	93.5	90.1	154.2	160.1	47.2	26.0	116.4	133.8	150.0	8.2	8.5	
116	Columbus		163.8		70.7	74.2	133.6	127.3	36.2	16.7	111.5	133.8	280.6	9.1	9.4	91.2
117	Grawfordville		95.3		91.8	74.8	142.2	174.5	35.3	6.8	94.0	125.0	213.8	3.6	5.8	84.1
118	Elkhart	137.5	82.5	10.8	52.1	76.8	147.1	99.8	31.3	11.0	103.1	134.2	351.0	4.8	4.4	87.5
119	Evansville	82.5	67.9	17.8	55.4	79.4	150.8	105.3	26.7	5.0	108.9	130.9	350.0	6.2	4.3	85.7
120	Fort Wayne	131.9	69.8	47.1		72.2	129.9		52.6	12.0	65.8	91.2	300.0	5.8		65.8
121	Goshen			5.2	64.2	77.0	127.8	113.7	30.5	13.6	103.1	134.0	225.0	8.9	7.5	84.9
122	Greencastle		83.5	20.5	45.3	74.4	136.1	82.9	38.1	6.0	81.9	110.1	445.3			
123	Indianapolis	68.0	60.9	10.4	60.6	73.8	126.8	104.1	33.7	19.5	102.7	139.1	320.7	6.0	5.0	94.7
124	Jacksonville		128.5	12.9	83.9	65.3	114.4	145.0	46.4	29.4	74.5	114.1	300.0	11.4	14.7	81.2
125	Kokomo	132.7	56.0	3.2	47.2	84.4	160.3	80.7	37.6	14.8				9.9	5.5	91.6
126	La Porte		74.2	16.9	60.6	81.5	146.8	109.8	33.4	27.8				4.7	4.8	82.0
127	Lawrenceburg	89.4	74.2		68.7	73.8	141.9	123.7	41.9	10.5	83.9	105.1	279.2	5.5	2.3	85.1
128	Ligonport	117.4	87.2	25.7	48.9	74.3	144.8	96.1	35.4	22.7	103.7	139.7	362.7	3.7		
129	Michigan City	100.1	65.7	34.4	58.8	72.0	129.5	105.9	38.8	35.0						
130	Mount Vernon	97.0	81.7	15.7	58.8	72.0	129.5	105.9	38.8	35.0						
131	Muncie*		112.7		81.7	72.5	134.9	151.9	44.4	9.5	101.0	139.4	225.0	8.8	9.9	
132	New Albany	85.7	71.8	16.1	52.6	73.2	131.8	94.7	42.3	18.6	96.1	131.3	250.0			
133	Peru	130.3	105.4	19.1	77.5	73.5	139.7	147.3	40.9	14.3	81.2	108.2	316.7	10.7	11.3	72.0
134	Richmond	101.6	75.8	25.4	60.4	70.6	141.7	107.4	33.8	8.3	97.1	122.0	274.4	6.1	4.6	74.4
135	Seymour	142.5	110.0	23.1	81.6	74.0	141.8	146.0	37.6	15.0	132.9	179.5	337.5	3.6	4.0	75.9
136	Shelbyville	118.5	107.5	9.3	88.5	82.3	148.2	155.3	38.2	19.0	102.7	124.7	353.3	10.4	11.1	
137	South Bend	81.8	61.2	25.1	46.4	75.9	135.0	82.6	35.4	19.6	117.6	155.1	400.0	5.3	3.2	95.4
138	Terre Haute	70.4	62.5	11.2	47.4	75.8	141.8	88.6	32.3	12.6	99.4	131.1	294.2	7.1	4.5	87.3
139	Union City	236.0	111.0	53.0	76.2	68.5	123.5	137.1	33.0	25.0	100.5	140.5	290.0	0.6	7.3	76.3
140	Valparaiso		65.5	34.0	50.6	77.2	136.7	87.5	35.5	10.5	91.5	118.5	490.0	10.2	6.7	75.3
141	Vincennes	110.6	65.5	40.8	51.2	78.2	153.3	100.4	39.5	13.0	93.6	119.6	217.2	11.5	7.6	79.9
142	Washington	134.2	103.2	23.1	75.5	73.2	123.0	126.9	39.7	31.6	98.8	135.1	255.0	7.3	7.5	73.7
IOWA.																
143	Atlantic		170.0		114.7	67.2	117.6	200.7	59.4	10.0	73.1	116.2	305.0	13.4	22.8	
144	Boone		170.0		137.9	80.3	145.5	248.2	44.1	4.5	95.0	117.5	285.0	9.6	16.3	71.3
145	Burlington*	124.8	105.8	15.2	68.9	63.1	125.0	122.3	36.3	17.5	83.8	137.9	333.3	5.0	5.3	

*Statistics of 1880-87.

TABLE 25.—Comparative Statistics, for 1887-88, of Enrolment, Attendance, Teachers, and Sitings in Common Schools, etc.—Continued.

City or Town.	Ratio of Total Public and Private School Enrolment to Population 6-14.		Ratio of Public School Enrolment to Population 6-14.		Ratio of Private School Enrolment to Total Public and Private Enrolment.		Ratio of Average Attendance to—		Average Number of Each Person Attending of Each Days Attendance of Each Person Attending.		Number of Pupils in Average Attendance of Each Teacher.		Ratio of Male Teachers to Whole Number of Teachers.		Number of Pupils Enrolled.		Number of Sitings to—		Average Number of Sittings to a Building.		High Schools.		
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
IOWA—continued.																							
146	83.1	72.6	12.6	49.2	67.8	132.9	96.5	33.2	3.1	89.8	132.4	187.7	4.3	3.1	73.3	1	1	1	1	1	1	1	1
147	155.0	134.6	13.2	70.2	70.2	132.6	178.5	38.6	13.3	70.9	129.5	187.5	9.3	12.6	87.7	2	2	2	2	2	2	2	2
148	115.9	91.6	21.0	64.9	70.9	135.5	124.0	32.0	13.0	95.1	134.1	438.6	6.9	6.4	79.5	3	3	3	3	3	3	3	3
149	162.4	142.5	12.3	92.7	64.9	114.2	162.8	31.8	1.4	81.3	125.3	323.4	6.5	9.2	76.2	4	4	4	4	4	4	4	4
150	119.2	118.1	16.9	80.1	67.8	119.9	141.6	24.3	5.4	89.2	131.8	358.9	5.1	6.0	79.4	5	5	5	5	5	5	5	5
151	110.2	73.2	38.6	54.7	74.7	119.4	109.4	25.4	11.9	98.4	131.8	358.9	5.4	3.9	95.8	6	6	6	6	6	6	6	6
152	134.6	119.7	11.0	85.7	71.6	135.6	150.4	34.1	18.2	95.5	133.5	143.1	9.8	5.5	81.3	7	7	7	7	7	7	7	7
153	102.8	75.0	26.2	53.8	73.5	135.7	103.7	34.6	10.0	96.4	131.1	191.4	4.9	7.4	81.3	8	8	8	8	8	8	8	8
154	114.1	94.1	17.5	70.4	74.7	142.0	133.7	34.6	17.6	98.9	123.7	316.7	5.9	5.6	81.3	9	9	9	9	9	9	9	9
155	128.9	99.2	23.1	64.5	65.0	136.0	128.9	32.5	5.0	100.0	153.9	230.0	5.7	5.7	81.3	10	10	10	10	10	10	10	10
156	161.2	145.9	3.5	107.3	73.6	129.5	183.5	33.9	4.8	105.5	143.4	340.0	9.7	14.2	81.3	11	11	11	11	11	11	11	11
157	193.6	139.0	28.2	98.6	70.9	135.5	174.4	33.6	6.0	122.1	172.0	372.0	13.4	18.6	81.3	12	12	12	12	12	12	12	12
158	153.2	132.9	13.3	94.6	68.5	128.1	170.2	33.3	9.5	91.1	128.0	193.7	6.3	8.4	81.3	13	13	13	13	13	13	13	13
159	166.4	164.7	1.0	104.9	63.7	110.2	181.5	30.5	12.0	97.7	133.3	308.2	12.2	20.0	81.3	14	14	14	14	14	14	14	14
160	164.6	158.1	3.9	103.7	66.9	127.1	200.9	41.1	7.4	81.4	121.7	400.0	4.0	6.4	81.3	15	15	15	15	15	15	15	15
161	75.5	71.2	5.8	45.8	61.4	113.7	85.2	38.9	7.4	73.6	114.3	217.8	3.2	3.8	81.3	16	16	16	16	16	16	16	16
162	148.5	121.0	18.5	66.4	54.9	97.1	117.5	26.8	5.6	85.2	155.3	250.0	7.3	8.8	81.3	17	17	17	17	17	17	17	17
163	145.6	143.6	0	95.9	65.9	116.0	163.0	40.4	6.2	91.7	139.0	300.0	4.1	5.9	81.3	18	18	18	18	18	18	18	18
KANSAS.																							
164	101.2	63.8	32.0	55.1	80.2	125.0	86.0	43.6	15.4	141.3	176.3	500.0	2.6	1.8	81.3	19	19	19	19	19	19	19	19
165	136.3	136.3	0	88.4	64.9	116.8	159.2	43.0	11.8	90.5	139.5	340.0	7.3	9.9	81.3	20	20	20	20	20	20	20	20
166	153.5	146.7	4.4	99.1	78.5	108.0	158.5	40.8	22.5	101.6	150.4	220.8	6.9	10.1	81.3	21	21	21	21	21	21	21	21
167	115.8	110.5	4.6	88.5	67.2	135.9	151.3	33.1	7.7	68.4	131.7	188.9	11.2	12.3	81.3	22	22	22	22	22	22	22	22
168	155.1	149.9	3.4	63.1	62.2	111.9	167.7	45.4	20.5	102.3	110.0	243.8	2.8	4.2	81.3	23	23	23	23	23	23	23	23
169	196.0	180.6	7.9	136.6	70.1	126.2	227.9	48.8	9.5	102.3	146.0	498.7	4.7	8.5	81.3	24	24	24	24	24	24	24	24
170	198.6	162.6	18.5	108.8	66.9	119.1	193.7	43.3	23.8	91.9	141.8	322.8	5.7	9.2	81.3	25	25	25	25	25	25	25	25

171	Kansas City*	89.2	77.3	13.4	46.8	60.6	96.9	74.9	39.1	19.6	70.7	131.7	308.6	2.6	2.0	-----
172	Lawrence	130.7	115.4	11.7	90.0	78.0	124.8	144.0	57.4	18.2	76.8	98.5	157.8	9.4	10.9	-----
173	Leavenworth	136.7	84.9	37.9	79.0	93.1	160.2	136.1	52.2	16.1	89.5	96.1	308.0	7.1	6.1	95.2
174	Marysville*	-----	-----	-----	80.4	60.4	126.2	152.7	48.5	50.0	81.3	122.4	217.5	-----	-----	-----
175	Newton	149.5	121.0	5.2	92.5	65.3	112.1	158.9	43.1	9.1	86.6	132.7	419.7	3.3	4.7	-----
176	Ottawa	119.1	115.8	2.8	87.1	72.7	130.8	151.4	40.5	16.7	91.1	125.3	466.7	5.3	6.1	84.0
177	Parsons*	174.7	145.6	16.6	89.1	59.8	193.7	161.8	38.2	29.2	71.4	119.4	313.5	4.0	5.8	-----
178	Salina	145.4	121.0	16.8	86.8	74.2	133.7	161.8	38.2	8.3	85.2	111.7	211.0	4.3	5.3	83.0
179	Wapaketa	110.3	93.4	15.3	65.7	70.5	126.8	118.4	43.3	9.0	107.8	159.0	313.2	3.0	3.8	-----
180	Wichita	105.4	105.4	-----	53.5	56.4	97.1	102.3	33.9	13.4	73.5	133.8	263.9	2.8	3.0	62.2
181	Winfield	144.2	130.3	3.4	92.7	66.6	113.2	157.6	38.1	8.0	83.9	120.0	300.0	-----	-----	-----
KENTUCKY.																
182	Bowling Green	124.3	92.1	25.8	62.9	68.3	133.9	123.3	46.1	-----	88.9	130.1	510.0	-----	-----	-----
183	Covington	70.5	53.8	23.6	40.1	74.5	-----	128.2	42.5	10.3	85.1	114.2	550.0	4.4	2.4	73.1
184	Dayton	119.2	73.2	38.6	64.1	87.6	175.2	128.2	50.6	9.1	110.1	125.7	350.0	-----	-----	-----
185	Hopkinsville*	134.0	112.3	17.0	78.9	68.7	149.5	157.8	34.2	7.7	94.9	135.1	600.0	-----	-----	-----
186	Lexington*	67.2	53.6	11.3	-----	-----	-----	-----	36.1	27.0	105.8	-----	277.8	0	0	-----
187	Louisville	-----	-----	-----	48.5	71.6	146.1	-----	36.1	8.5	-----	111.3	350.3	4.1	-----	84.1
188	Newport	76.3	59.8	19.9	72.3	79.3	158.6	97.0	45.7	5.4	88.2	111.3	350.3	5.7	3.5	95.1
189	Owensborough	115.0	100.7	12.4	73.1	72.6	129.0	129.9	41.0	12.0	100.6	138.7	355.0	3.8	3.9	79.6
190	Paducah	68.6	63.6	7.3	44.8	70.5	134.6	85.6	50.0	25.9	95.2	135.1	228.0	4.3	2.8	75.9
191	Paris	-----	80.8	-----	55.4	68.0	137.2	110.8	45.4	20.0	90.6	132.2	300.0	-----	-----	-----
LOUISIANA.																
192	Baton Rouge*	-----	-----	39.9	30.4	84.0	97.3	-----	38.6	42.9	74.1	120.5	372.5	1.5	0.7	94.6
193	New Orleans	-----	40.4	-----	-----	61.4	111.8	55.3	38.8	6.2	-----	-----	-----	-----	-----	-----
MAINE.																
194	Anchuta	104.3	104.3	0	90.3	86.6	155.9	162.6	24.0	12.3	116.6	134.6	57.5	10.3	10.8	98.8
195	Augusta	118.6	143.6	3.4	83.1	61.9	165.9	132.0	24.2	9.1	95.0	133.3	60.6	7.5	10.8	63.6
196	Bangor	128.7	120.7	6.2	106.9	83.6	135.9	188.2	-----	-----	116.4	131.5	97.5	-----	-----	-----
197	Bath	145.6	145.6	-----	122.9	84.5	172.3	250.8	40.5	8.1	127.0	150.4	96.6	12.8	18.6	93.4
198	Biddeford	102.2	73.2	28.3	64.9	84.5	141.2	103.5	27.9	19.6	107.0	120.0	128.6	9.4	6.9	90.2
199	Calais	165.2	152.5	7.7	127.1	83.3	150.0	225.0	53.6	10.7	100.0	120.0	128.6	4.2	6.4	80.0
200	Deering	132.3	122.3	-----	106.8	87.3	172.9	211.5	26.2	8.0	73.6	104.1	123.7	20.0	24.5	95.3
201	Eastport	136.5	133.2	2.5	94.2	70.7	131.6	175.3	43.8	20.3	73.6	104.1	123.7	3.6	4.8	73.8
202	Gardner	122.2	122.2	-----	117.5	96.1	176.0	207.8	39.4	15.0	126.2	131.3	86.3	12.0	14.6	92.9
203	Lewiston*	116.5	73.4	37.0	63.6	94.9	177.5	130.2	32.8	7.0	99.2	135.8	319.4	7.5	5.5	95.0
204	Portland	136.8	113.5	17.0	82.9	73.0	138.8	157.5	29.4	9.4	-----	-----	-----	6.6	7.5	-----
205	Rockland*	-----	-----	-----	53.9	40.1	-----	-----	12.0	21.3	-----	-----	-----	9.8	11.3	73.4
206	Saco	-----	115.8	-----	85.9	88.4	163.6	157.8	47.8	9.5	-----	-----	-----	7.9	7.7	95.6
207	Waterville	122.0	96.5	20.9	85.3	-----	-----	-----	-----	11.1	147.0	-----	135.5	10.1	9.1	-----
208	Westbrook	91.2	90.4	0.8	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MARYLAND.																
209	Baltimore	-----	102.8	-----	64.5	62.7	127.3	130.9	33.9	-----	88.0	140.2	621.4	2.4	2.5	84.2
210	Frederick	143.8	98.8	39.5	70.7	71.0	104.7	103.4	35.6	17.7	118.4	165.3	250.0	-----	-----	-----
211	Hagerstown	75.0	65.6	12.5	47.6	72.4	117.4	77.0	32.7	23.8	107.1	147.8	375.0	5.9	3.8	89.0

* Statistics of 1886-87.

TABLE 25.—Comparative Statistics, for 1887-88, of Enrolment, Attendance, Teachers, and Sitings in Common Schools, etc.—Continued.

City or Town.	Ratio of Total Public and Private School Enrolment to Population 6-14.		Ratio of Public School Enrolment to Population 6-14.		Ratio of Private School Enrolment to Total Public and Private Enrolment.		Ratio of Average Attendance to—		Average Number Days Attendance of Each Person Enrolled.		Total Attendance is Equivalent to Attendance of Each Person between 6 and 14 for—		Number of Pupils in Average Attendance to Each Teacher.		Ratio of Male Teachers to Whole Number of Teachers.		Number of Sitings to—		Average Number of Sitings to a Building.		High Schools.		
	Per cent.	Ratio	Per cent.	Ratio	Per cent.	Ratio	Per cent.	Ratio	Per cent.	Ratio	Days.	Per cent.	Per cent.	Ratio	Per cent.	Ratio	Each 100 Pupils Enrolled.	Each 100 Pupils in Average Attendance.	Average Number of Sitings to a Building.	Total Public School Enrolment.	Population 6-14.	Ratio of Average Attendance to Enrolment.	Ratio of Average Attendance to Enrolment.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
MASSACHUSETTS.																							
212 Adams.....	128.5	138.5	0	93.5	72.8	149.4	135.1	40.6	11.1	81.1	111.5	203.8	3.0	3.8	91.7								
213 Amesbury.....	126.4	185.7	32.2	71.3	83.9	149.4	135.1	28.2	3.6	142.1	170.9	75.0	11.8	3.8	91.7								
214 Andover.....	174.3	151.9	12.9	106.9	70.3	124.5	189.1	21.8	95.0	107.4	152.7	80.0	6.8	17.2	79.6								
215 Arlington*.....	126.5	126.5	0	106.4	84.1	124.5	189.1	20.0	14.8	109.0	129.6	210.0		8.9									
216 Athol.....		148.6		108.2	72.9	127.5	189.5	23.7	4.3	113.3	153.4	70.7											
217 Attleborough.....				96.9			179.2	28.6	6.1	112.8	132.4	96.2											
218 Beverly.....	120.0	118.9	0.9	97.8	82.3	100.2	130.4	34.6	10.5	112.8	137.1	200.0	9.2	10.9	93.2								
219 Blackstone.....	130.1	130.1	0	80.6	61.9	110.3	143.6	30.4	13.0	97.4	157.4	137.5	5.8	7.5	63.2								
220 Boston.....	127.3	113.6	10.7	89.3	78.5			42.3	12.5				4.3	4.9	94.3								
221 Braintree.....	146.4	145.1	0.9	102.1	70.3	137.1	199.0	21.7		108.5	154.3	87.0	9.2	13.4	93.2								
222 Brookline.....	163.2	145.9	10.6	113.3	77.7	155.3	226.5	45.1	13.1				6.1	8.1	72.3								
223 Cambridge.....	143.7	133.1	7.4	100.6	75.6	151.1	201.1	31.7	8.1	90.6	127.8	378.7	5.4	6.2	85.5								
224 Chelsea.....	133.5	115.0	13.8	97.0	84.3	168.6	183.9	36.9	4.5	94.9	156.6	172.2	5.0	6.4	91.0								
225 Chelsea.....	138.9	138.7	7.4	91.2	70.9	141.7	182.4	40.0	6.0	98.9	127.8	163.6	4.8	7.3	89.5								
226 Chicopee.....	134.6	83.5	38.0	50.9	61.0		191.7	39.1	6.3	84.9	120.6	208.3	12.6	12.6	86.0								
227 Clinton.....	127.7	136.5	1.0	97.8	77.4	151.6		32.4	17.2	103.4	135.7	118.2	8.1	11.6	84.3								
228 Concord.....				109.3	70.4	133.7	202.2	33.0	13.2				2.5	13.9	96.3								
229 Danvers.....	146.3	143.4	2.0	109.3	76.2	141.0	202.2	33.0	13.2	111.0		69.2	4.9	6.1	86.8								
230 Dedham.....	149.7	147.1	1.7	109.1	74.2	148.3	218.2	27.7					5.0	7.0	86.8								
231 Easthampton*.....	123.9	123.9	0	119.9	85.8	166.5	222.7	38.8	6.7	105.7	123.1	233.8	5.0	7.0	86.8								
232 Everett.....	142.8	139.7	2.2	119.9	85.8	166.5	222.7	38.8	6.7	105.7	123.1	233.8	5.0	7.0	86.8								
233 Fall River.....	127.2	105.8	16.9	69.1	63.3	130.6	138.1	34.1	6.3	98.5	147.8	241.5	4.9	5.1	68.2								
234 Fitchburg.....	199.7	172.5	13.6	119.8	69.5	124.0	213.9	31.0	9.9	104.3	150.2	150.5	10.2	17.6	68.2								
235 Framingham*.....	125.7	152.8	0	105.5	69.1	131.2	200.5	29.0	5.0	101.0	146.0	108.0	7.5	11.5	79.7								
236 Franklin.....	125.7	121.5	3.4					33.7	10.0	104.1			6.6	8.0	89.1								
237 Gloucester.....	131.0	121.3	8.0	103.0	84.9	159.6	193.6	33.7	5.0	106.3	125.3	203.0	6.4	7.8	89.1								
238 Great Barrington.....				108.5	98.5		181.5	30.8	16.7				10.8	12.4	92.5								
239 Greenfield.....	146.7	142.7	2.7	110.7	77.6	139.7	199.2	27.6	6.7	95.0	122.5	78.0		15.4	93.4								

240	Haverhill	141.2	113.5	21.5	84.0	73.0	105.8	120.1	27.6	5.1	123.1	149.5	81.9	5.5	6.2	97.0
241	Hingham	102.5	133.0	13.0	118.0	82.2	123.0	107.1	28.7	28.6	123.1	149.5	81.9	14.1	20.1	94.0
242	Holyoke	127.8	88.4	32.4	54.4	62.9	126.6	173.7	30.3	8.9	73.9	117.6	206.5	4.5	3.9	86.8
243	Hopkinton	158.8	172.0	0	110.5	67.8			47.3	21.3				5.4	7.8	89.8
244	Hyde Park	172.0	88.0	21.5	76.0	86.8	171.5	102.0	33.4	5.4	100.4	117.0	251.9	4.6	4.0	90.8
245	Lawrence	172.0	88.0	0	112.9	80.1	154.9	203.3	36.6	8.3	88.0	113.7	83.3	12.3	16.1	83.0
246	Leominster	131.2	131.2	0	71.6	66.1			34.3	8.2	89.1	134.7	196.8	5.4	5.9	63.3
247	Lowell	24.4	109.6	9.3	93.7	96.2	165.6	170.9	40.1	7.5	105.8	122.6	233.2	5.4	6.0	87.3
248	Lynn	119.8	108.7	17.4	87.0	73.4	143.5	105.2	30.2	4.3	111.9	152.4	298.8	6.1	7.2	93.2
249	Malden	143.6	118.6	0.9	91.4	78.8			33.7	9.7	119.1	151.1	131.6	6.6	7.9	87.8
250	Marlborough	117.0	116.0		100.5	90.8	158.2	175.1	34.0	3.8				6.8	7.4	94.7
251	Marblehead	110.7	110.7	0	106.9	73.6	153.6	211.9	33.7	18.6	110.0	138.5	105.7	6.7	9.2	88.9
252	Medford	138.0	138.0		109.3	81.6	155.0	207.7	33.1	3.4	160.8	123.0	140.0	9.3	12.4	96.1
253	Melrose	134.0	134.0		100.0	83.5	150.2	180.0	27.9	8.7	139.1	166.6	103.8	5.7	6.9	88.6
254	Methuen	119.8	119.8	0	116.8	80.0			26.5	10.7	148.6	109.5	64.7			
255	Middleborough	141.9	130.1	8.3			132.0	147.0	23.8	2.5	143.8	190.6	123.1	7.8	8.7	95.0
256	Milford	128.0	111.4	13.0	84.0	75.4				12.5	103.1					
257	Millbury	119.8	119.8							21.7	116.3	152.0		11.6	14.3	
258	Monson	123.6	123.6	0	84.5	77.1	138.8	132.0	32.7	7.7	117.8			6.4	7.0	92.1
259	Montague	109.7	109.7	0	76.7	88.7			34.2	6.7				14.6	12.7	92.3
260	Nantucket	123.0	86.4	29.7	131.1	89.0	144.2	214.9	34.1	7.7	123.0	140.9	130.0	9.1	13.6	78.3
261	Needham	149.0	149.0		110.6	87.9	162.6	197.2	23.2	8.4	127.0	144.5	200.0	8.1	10.2	91.7
262	New Bedford	137.2	125.8	32.8	153.6	72.5	145.1	104.6	30.1	10.3	104.9	141.7	111.7	7.4	6.0	23.9
263	Newburyport	126.7	138.8	33.1	108.1	77.4	154.8	216.3	32.6	14.6	107.2	138.5	221.3			
264	Newton	139.7	139.7	12.7	78.0	64.5	118.0	144.0	32.3	9.1	72.5	112.5	200.0	3.4	4.2	94.7
265	North Adams	140.3	132.6		98.8	69.9	139.8	197.7	32.8	5.5				6.6	9.4	88.1
266	North Brookfield	141.3	141.3	0	97.8	69.9	139.8	197.7	32.8	5.5	109.3	142.0	106.4	4.5	5.7	89.0
267	Northampton	139.6	127.1	9.0	97.8	77.0	137.0	174.1	33.0	5.5	115.5	174.0	116.2	2.8	4.4	97.1
268	Northbridge	136.1	158.2		104.9	66.4	129.4	204.7	36.4	11.6	105.5	146.9	257.5	3.6	4.4	76.7
269	Peabody	136.1	123.3	2.2	88.5	71.8			29.3	6.6	92.7	134.8	111.1	4.0	5.4	91.5
270	Pittsfield	138.2	133.2	5.8	91.6	68.8	134.1	178.7	29.7	13.5						
271	Plymouth	140.8	140.8	0	108.7	77.3	146.9	206.8	31.4	16.7	109.3	141.3	106.9	13.0	18.3	78.9
272	Randolph	139.1	139.1		122.9	88.4			36.0	22.6	122.8	138.9	110.0	7.8	10.9	91.4
273	Rockland	139.1	139.1		73.8	76.3	145.0	140.2	30.1	7.8	110.8	145.2	273.9	6.8	6.5	
274	Salem	128.1	96.7	24.5	102.8	88.2	167.7	194.8	29.0	7.5	113.2	128.3	268.0	6.6	7.7	
275	Somerville	129.7	116.2	10.5	88.2	64.0	121.4	104.4	25.6	4.0	142.2	222.2	118.3	6.2	5.1	83.0
276	Southbridge	134.4	82.7	38.5	52.9	64.0	121.4	163.0	31.3	7.2	99.6	136.7	210.7	6.2	7.1	82.9
277	Springfield	140.9	114.0	18.7	83.1	72.9	142.1	229.1	31.2	7.7	94.7	123.2	142.9	8.5	12.7	88.9
278	Stoneman	132.5	149.0	2.8	114.5	76.9	153.8	229.1	31.2	20.0	124.9	177.0	98.2	7.3	7.7	
279	Stoughton	142.5	105.8	25.8	74.3	70.2	126.3	133.7	37.0	11.0				4.7	5.7	
280	Taunton	126.9	123.5	2.7	90.7	73.4			37.7	21.0	102.1	130.6	146.8	9.9	13.0	85.9
281	Ware	130.7	130.7		102.5	78.4	156.9	205.0	38.8	13.8	102.1	130.6	146.8	9.9	13.0	85.9
282	Wareham	136.5	136.5		111.4	81.6	154.2	210.5	38.3	9.4	101.7	124.6	218.4	6.4	8.7	83.4
283	Waltham	149.8	149.8	0	106.6	70.5	112.8	103.0	29.8	12.5	88.8	123.9	75.6	4.0	6.1	83.4
284	Watertown	143.7	143.7		112.3	78.1			33.3	12.9	90.8	116.2	130.0	7.0	10.1	87.8
285	Webster	133.0	64.2	68.3	35.4	70.9	126.8	63.2	26.0	13.3	104.5	147.5	82.1	9.1	4.9	88.0
286	West Springfield	154.7	151.8	1.9	136.4	89.9			34.8	7.4	114.7	127.7	109.1	7.0	10.6	90.4
287	Westborough	133.4	149.5	2.5						8.7					11.4	
288	Westfield	125.9	123.6	1.7	95.7	77.4	154.7	191.3	29.4	9.1	89.8	113.4	75.0	7.8	9.8	86.6
289	Weymouth	153.8	151.7	1.3	128.3	84.6	165.8	251.5	35.9	15.4	117.9	139.4	130.0	7.9	12.0	93.9

* Statistics of 1886-87.

TABLE 25.—Comparative Statistics, for 1887-88, of Enrolment, Attendance, Teachers, and Sitings in Common Schools, etc.—Continued.

City or Town.	Ratio of Total Public and Private School Enrolment to Population 6-14.		Ratio of Public School Enrolment to Population 6-14.		Ratio of Private School Enrolment to Total Public and Private Enrolment.		Ratio of Average Attendance to—		Average Number Days Attended of Each Person Enrolled.	Total Attendance is Equivalent to Attendance of Each Person and 14 for—	Number of Pupils in Average Attendance of Each Teacher.	Ratio of Male Teachers to Whole Number of Teachers.	Number of Sitings to—		Average Number of Sitings to a Building.	High Schools.		
	Per cent.	Population 6-14.	Per cent.	Population 6-14.	Per cent.	Enrolment.	Per cent.	Enrolment.					Each 100 Pupils Enrolled.	Each 100 Pupils in Average Attendance.		Ratio of Enrolment to—	Per cent.	Ratio of Average Attendance to Enrolment.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Per cent.	Per cent.	Per cent.
MASSACHUSETTS—continued.																		
220 Winchester	125.6	121.7	27.1	73.5	71.0	135.9	138.9	29.8	9.4	133.5	188.0	358.4	11.0	11.4	77.0	5.6	6.9	77.0
221 Woburn	149.4	119.6	13.2	93.9	77.8	147.9	178.4	34.0	15.6	101.7	130.7	285.7	29.8	36.0	75.9	6.2	7.4	75.9
222 Worcester	116.5	94.6	18.8	86.1	91.0	172.1	162.8	29.6	16.3	122.3	134.3	281.1	9.6	9.1	63.1	9.6	9.1	63.1
MICHIGAN.																		
223 Adrian	142.0	103.4	27.1	73.5	71.0	135.9	138.9	29.8	9.4	133.5	188.0	358.4	11.0	11.4	77.0	5.6	6.9	77.0
224 Ann Arbor	139.1	120.7	13.2	93.9	77.8	147.9	178.4	34.0	15.6	101.7	130.7	285.7	29.8	36.0	75.9	6.2	7.4	75.9
225 Battle Creek	130.0	107.1	17.6	75.0	70.1	136.6	116.2	32.8	5.0	101.7	130.7	285.7	7.2	7.7	81.3	7.2	7.7	81.3
226 Bay City	143.4	143.4	0	81.2	68.4	130.4	159.7	36.5	20.0	100.2	146.4	400.5	6.4	9.0	68.4	6.4	9.0	68.4
227 Cadillac	112.5	67.9	39.5	40.7	62.7	122.4	83.3	36.0	25.0	80.6	128.5	185.0	11.3	17.2	73.3	11.3	17.2	73.3
228 Cheboygan	152.6	152.6	0	109.7	71.9	139.4	212.8	33.2	13.0	92.2	128.3	326.7	3.8	2.3	72.6	3.8	2.3	72.6
229 Detroit	90.4	61.6	31.9	43.8	71.2	142.3	87.7	38.8	4.8	88.5	124.4	447.0	6.1	5.8	83.0	6.1	5.8	83.0
230 East Saginaw	111.7	95.1	14.8	70.9	74.5	146.0	138.9	34.2	10.0	89.8	120.5	294.6	9.6	8.5	85.7	9.6	8.5	85.7
231 Escanaba	162.6	80.0	43.6	52.0	53.4	116.9	104.1	38.4	10.0	106.5	128.3	350.0	17.8	32.3	61.1	17.8	32.3	61.1
232 Flint	211.9	181.6	14.3	136.3	70.0	150.4	273.1	35.4	2.6	103.5	138.0	295.6	5.6	7.1	71.8	5.6	7.1	71.8
233 Grand Haven	145.3	125.7	17.8	84.8	71.0	141.5	177.9	45.0	4.3	93.7	130.0	260.4	5.9	7.1	71.8	5.9	7.1	71.8
234 Grand Rapids	165.3	113.5	18.0	113.9	85.3	165.5	164.1	32.0	2.4	107.1	136.5	390.8	15.0	20.1	71.8	15.0	20.1	71.8
235 Ionia	144.1	131.0	9.1	93.9	73.2	138.4	224.9	34.1	16.0	100.0	172.2	256.0	11.9	15.6	90.3	11.9	15.6	90.3
236 Jackson	136.8	118.0	13.0	86.6	72.8	145.5	173.2	35.4	4.3	94.6	130.0	316.7	6.8	8.1	90.3	6.8	8.1	90.3
237 Kalamazoo	155.4	155.4	0	0	0	145.5	173.2	35.4	10.3	76.5	121.5	265.4	4.7	7.4	71.8	4.7	7.4	71.8
238 Ludington	113.1	113.1	18.0	72.6	64.2	124.6	140.9	39.5	8.3	78.1	121.5	235.8	7.5	8.4	83.8	7.5	8.4	83.8
239 Marquette	138.0	113.1	13.0	86.6	72.8	145.5	173.2	35.4	10.3	76.5	121.5	265.4	4.7	7.4	71.8	4.7	7.4	71.8
240 Marquette	138.0	113.1	13.0	86.6	72.8	145.5	173.2	35.4	10.3	76.5	121.5	265.4	4.7	7.4	71.8	4.7	7.4	71.8
241 Marshall	139.1	109.6	21.3	82.7	75.4	146.4	160.4	24.3	8.7	148.4	196.8	220.0	10.8	11.8	60.7	10.8	11.8	60.7
242 Menominee	128.6	99.9	22.3	65.6	65.7	123.1	100.4	33.3	4.2	87.7	133.5	178.0	5.0	5.0	60.7	5.0	5.0	60.7
243 Monroe	114.4	62.0	46.9	38.1	61.5	123.1	76.3	33.3	8.3	96.9	157.5	157.5	12.3	7.6	71.8	12.3	7.6	71.8

314	Negaunee.....	116.0	81.2	30.0	54.6	67.2	129.1	104.8	41.9	6.7	107.1	159.3	250.0	5.5	4.4	82.4
315	Niles.....	141.2	127.2	10.0	34.2	71.1	138.4	176.0	30.5	9.1	103.5	142.4	190.8	10.1	12.8	75.6
316	Pontiac.....	156.4	136.4	0	111.3	71.1	141.7	221.6	32.3	16.7	101.0	142.0	220.0	11.8	18.4	83.0
317	Port Huron.....	111.8	111.8						32.6	2.6	77.2	101.6	225.0	6.2	3.5	83.0
318	Saginaw.....	163.2	152.2	6.7	95.7	62.9	121.0	185.6	43.5	10.0	102.9	161.6	375.0	6.2	4.7	74.1
319	West Bay City.....	120.7	122.0	31.4	66.1	79.7	161.0	133.4	34.3	14.3	112.3	140.8	200.0	3.1	9.8	77.5
320	Wyandotte.....	109.0	87.8	19.4	61.5	69.8	139.9	122.9	25.2	21.7	120.6	172.4	225.3	11.8		
321	Ypsilanti.....												250.9			
MINNESOTA.																
322	Anoka.....	141.3	132.4	6.3	93.6	70.9	127.7	108.7	34.8	11.1	90.6	127.8	200.0	7.7	10.2	70.7
323	Brainerd.....			0		67.0	117.2		36.9	5.9	101.5	151.5	190.0	4.1		92.1
324	Crookston.....			0		51.5	91.7		37.5	7.1	73.0	141.9	186.3	6.6	5.7	55.7
325	Duluth.....				111.7	58.8	111.1	211.1	29.0	10.0	93.4	153.9	256.0	3.6	6.9	79.8
326	Farmburg.....								36.9	9.1		147.7	157.1			
327	Marquette.....					64.5	113.5		33.7	17.4	82.2	127.5	268.8	5.9		
328	Minneapolis.....		69.4		48.3	60.6	132.8	92.2	30.5	3.2	102.0	146.5	470.4	5.8	4.0	70.8
329	Red Wing.....			13.3		70.6	124.8		36.9	8.0	152.9	216.6	400.0	5.7		83.6
330	St. Cloud.....		91.4	34.1	59.9	65.5	120.0	109.6	31.7		92.0	140.4	160.0	3.9	3.6	68.5
331	St. Paul.....					69.3	136.0		30.7	5.6	123.3	180.9	479.1	4.1		89.5
332	Still Water.....			20.4		78.0	140.6		30.5	7.5	98.2	127.2	221.4	7.4		
333	Winona.....			29.3		70.5	110.0		32.7	9.6	116.0	104.6	406.7	3.2		
MISSISSIPPI.																
334	Jackson.....	177.3	137.0	22.7	88.7	64.7	103.5	141.8	91.7	16.7	101.7	157.0	723.5	5.7	4.2	79.3
335	Meridian.....		72.5		47.0	64.8	123.1	89.3	40.3	8.7	100.4	153.2	600.0	5.9	3.3	78.6
336	Natchez.....		56.4	29.5	36.9	65.5	109.6	61.7	34.0	8.7	104.3	144.1		0		
337	Vicksburg.....		67.2	30.7	47.2	70.3	112.4	75.5	41.1	7.4	101.3					
MISSOURI.																
338	Butler.....	136.2	123.5	9.3	75.7	61.3	107.2	132.4	42.6	16.7	81.5	133.1	226.7	4.1	5.0	85.3
339	Carrollton.....	139.2	130.3	6.4	101.1	77.6	133.4	173.7	40.2	22.7	82.9	106.8	315.0	10.0	13.0	84.2
340	Cardigo.....	124.5	117.5	5.6	85.0	72.3	127.3	149.5	44.3	15.4	78.5	108.5	312.5			
341	Chillicothe.....	113.1	93.4	17.4	64.6	69.2	109.5	102.3	43.8	28.7	94.7	137.0	300.0		8.9	
342	Columbia.....	154.2	122.0	19.3	85.1	68.1	124.7	155.7	40.1	15.0	99.7	146.2	585.0	7.1	8.8	89.2
343	Columbia.....	146.7	77.4	47.3	57.4	74.1	114.3	88.5	41.4	14.3	89.6	120.9	350.0			
344	De Soto.....	91.1	86.6	4.9	78.9	91.2	123.8	108.9	52.6	20.0	156.0	171.1	430.0			
345	Hannibal.....	102.7	93.1	9.4	62.7	67.4	119.2	111.0	36.2	6.7	98.0	145.5	395.0	5.7	5.3	73.4
346	Independence.....	143.1	122.0	14.7	74.3	60.9	82.8	101.0	45.8	12.5	62.3	102.4	250.0	2.5	5.0	75.7
347	Jefferson City.....		77.2		57.5	74.5	131.1	101.2	43.7	11.3	84.8	150.6	513.5	4.5	3.1	90.1
348	Kansas City.....		69.8		39.3	56.3	101.4	70.8	40.0	21.4	89.2	129.4	165.0	12.7	8.0	90.4
349	Lexington.....		62.9		43.4	77.3	122.7	77.2	36.4	11.8	89.6	144.6	475.0	6.7	7.4	77.2
350	Louisville.....		110.7	13.4	74.9	67.6	106.6	118.1	46.9	21.4	89.6	129.7	241.0	12.1	15.8	69.2
351	Maryville.....		140.6	6.9	90.4	68.9	122.2	100.0	46.4	12.5	89.6	129.7	475.0	12.1	15.8	69.2
352	Mexico.....		154.1	16.0	83.6	64.6	116.3	150.5	42.4	27.8	81.4	126.0	480.0	9.8	12.7	68.1
353	Moberly.....		83.4	15.3	51.1	72.4	114.4	80.8	48.0	16.0	84.5	116.7	350.0	5.7	4.0	67.4
354	Nevada.....		151.8	12.7	87.2	65.8	103.9	137.8	43.2	14.3	86.9	132.2	400.0	0	0	

*Statistics of 1886-87.

TABLE 25. — Comparative Statistics, for 1887-88, of Enrolment, Attendance, Teachers, and Sittings in Common Schools, etc.—Continued.

City or Town.	2	3	4	Ratio of Average Attendance to—		7	8	9	10	Number of Sit-tings to—		13	High Schools.		
				Ratio of Public School En-rolment to Population 6-14.	Ratio of Private School En-rolment to Total Public Enrolment.								Ratio of Enrol-ment to—	15	16
1				Population 6-14.	Enrolment.		Total Attendance is Equiva-lent to Attendance of Each Person between 6 and 14 for—	Number of Pupils in Aver-age Attendance to Each Teacher.	Ratio of Male Teachers to Whole Number of Teach-ers.	Each 100 Pupils En-rolled.	Each 100 Pupils Attend-ance.	Average Number of Sittings to a Building.	Total Public En-rolment.	Population 6-14.	Ratio of Average At-tendance to Enrol-ment.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Days.	Days.	Days.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
MISSOURI—continued.															
355 Pierce City	109.5	84.6	22.7	75.3	60.7	96.0	119.1	47.4	20.0	98.0	48.9	125.0	6.9	5.8	91.4
356 Rich Hill	128.1	124.1	3.5	37.5	82.0	159.3	72.9	45.2	28.6	29.7	48.9	162.5	5.3	6.6	69.0
357 St. Charles	132.1	45.7	65.4	30.6	68.6	132.0	60.6	36.7	30.0	103.4	126.1	191.7	2.7	1.2	85.7
358 St. Joseph	51.8	45.9	11.5	85.4	69.4	128.9	131.1	34.6	14.3	83.4	123.1	204.5	4.4	2.0	81.3
359 St. Louis .....	.....	.....	28.5	.....	.....	.....	.....	.....	.....	83.5	123.2	460.8	2.1	.....	78.3
360 Sedalia .....	.....	115.5	.....	85.4	73.9	131.1	151.4	43.9	6.8	82.2	111.3	263.8	5.1	5.9	86.6
361 Springfield	122.5	111.2	9.2	67.1	60.3	97.0	107.6	50.6	10.6	72.6	120.3	317.8	7.9	8.8	67.2
362 Washington	59.1	32.1	45.7	28.7	89.4	170.2	54.7	45.6	57.1	114.8	128.5	203.0	0	0	.....
MONTANA.															
363 Butte City	146.9	138.1	6.0	75.3	54.5	101.4	140.0	32.5	12.0	94.1	172.6	142.3	3.4	4.6	60.7
NEBRASKA.															
364 Beatrice	150.7	147.2	6.1	88.4	60.0	105.7	155.5	35.8	11.5	77.5	129.0	200.0	4.3	6.3	.....
365 Fremont .....	.....	147.6	.....	97.0	65.7	124.9	184.3	37.3	9.5	100.6	133.1	240.0	5.3	7.8	.....
366 Grand Island	140.2	133.5	4.8	87.4	65.5	123.1	164.3	35.0	17.5	91.1	139.1	272.4	5.9	8.1	70.3
367 Hastings	131.7	127.3	3.3	85.8	67.4	118.6	151.0	42.6	4.3	89.3	132.5	324.3	5.2	6.7	75.7
368 Kearney .....	.....	101.7	.....	96.0	94.3	169.8	172.8	35.4	8.3	95.5	101.2	143.3	6.9	7.0	82.3
369 Lincoln	90.2	86.0	4.6	64.9	75.5	135.8	116.8	47.3	7.6	88.9	117.8	368.1	4.2	3.6	82.6
370 Omaha	136.6	116.8	14.4	78.2	66.9	129.9	151.7	32.9	4.1	89.5	133.7	216.9	4.3	5.0	76.0
371 Plattsmouth	114.7	114.7	0	78.5	68.4	123.2	141.3	39.2	9.1	79.3	115.9	142.9	7.4	8.5	83.9
NEVADA.															
372 Carson City	107.1	103.1	3.8	92.7	90.0	.....	.....	57.3	10.0	87.9	97.7	183.7	12.4	12.8	89.0
373 Gold Hill .....	.....	.....	.....	.....	.....	.....	.....	.....	11.1	138.3	171.3	415.0	.....	12.6	83.3
374 Virginia City	132.4	119.7	11.7	94.4	80.7	150.9	176.4	50.0	9.5	.....	.....	600.0	5.0	5.8	89.2

NEW HAMPSHIRE.

375	Clarendon	114.9	113.4	1.3	84.9	74.9	128.5	145.7	26.9	4.0	117.1	156.3	47.7	12.3	13.9	79.1
376	Concord	127.9	90.9	28.9	68.8	78.7	142.2	124.6	39.6	2.6	92.2	110.8	154.2	10.9	8.1	81.3
377	Dover					75.6	137.0		27.2	4.9	90.1	130.9	76.8	9.0		89.3
378	Keene					81.3										
379	Manchester			50.2	68.7	67.2	120.0	116.7	32.5	9.2	131.9	187.0	151.8	5.0		91.8
380	Nashua			39.0	68.7	70.6	120.0	116.7	23.2	4.3	131.9	187.0	151.8	5.0		85.1
381	Portsmouth			8.6	68.7	72.8	141.2	175.3	25.6		103.4	137.5	137.5	7.6		94.3
382	Rochester			9.1	82.3	76.4	130.6	140.7	26.6	8.3	125.0	163.6	74.7	9.8		81.3
383	Southern			2.9	63.5	71.0	153.3	148.0	33.8	11.8	117.3	165.2	118.8	7.0		84.2

NEW JERSEY.

384	Atlantic City*	127.0	118.8	6.4	68.0	57.2	168.7	139.1	41.6	10.0	80.2	140.3	231.5	2.5	4.2	-----
385	Bayonne		100.1		53.6	50.6	103.1	100.4	28.1	8.3	71.3	141.0	381.0	0		97.3
386	Camden		144.2		89.6	62.1	130.4	188.1	50.6	8.9	61.7	99.4	562.5	0	0	-----
387	Elizabeth		60.9	36.4	47.2	67.5	134.3	94.0	41.3	6.3	74.1	109.7	580.4	3.7	2.6	83.6
388	Gloucester*					52.4	110.5	50.5	33.6	70.0	68.1	130.1	174.8	0	0	-----
389	Harrison		45.7	51.4	40.7	61.9	133.8	81.4	38.8	4.6	104.5	166.3	747.8	1.7	1.1	97.3
390	Jersey City		65.7	31.3		74.7	151.6	130.0	40.5	20.0	104.5	139.9	232.9	9.2	7.9	-----
391	Lambertville		100.0	3.0		69.7	153.3	186.8	32.7	7.7	132.7	134.9	161.6	4.1	5.0	88.9
392	Long Branch*		90.5	85.8				151.5	33.4	10.5	92.0	121.7	438.0	6.2	5.0	96.7
393	Millville		121.8	5.7		76.1	152.7	123.2	36.8	13.3	88.6	163.3	231.3	3.7	3.8	89.7
394	Montclair		80.7	37.4		70.3	162.7	112.2	28.3	10.0	99.0	127.3	379.7	8.5	5.6	77.0
395	Morrisstown		103.2	13.8		54.3	108.6	100.3	36.4	4.0	99.0	127.3	379.7	3.5	2.5	79.2
396	Mount Holly		66.2	36.2		77.7	151.6	95.7	33.6	7.3	83.4	123.4	461.1	3.4	2.2	82.4
397	New Brunswick		72.2	30.1		67.6	135.5	79.1	33.9	5.6	77.9	126.4	386.3	4.3	4.1	-----
398	Newark		63.2	41.4		61.6	125.1	124.7	37.3	3.2	83.9	127.2	294.0	4.8	4.8	47.5
399	Orange		107.9	22.2		66.0	132.0	123.3	34.1	7.5	68.0	111.2	291.2	4.7	5.1	88.2
400	Passaic		94.5	14.0		62.0	123.3	123.3	39.8	8.8	95.8	120.2	291.2	4.7	5.1	-----
401	Parsippany		117.5	108.5		74.3	148.5	161.0	35.6	5.7	91.8	125.1	390.0	4.7	5.1	-----
402	Phillipsburg		108.5	7.1		73.4	146.0	152.7	35.6	19.0	134.2	154.7	316.0	4.7	5.1	-----
403	Pittsford		132.3	161.6		86.8	165.0	139.3	38.9							-----
404	Rahway		106.5	81.6												-----
405	Salmon		123.1	111.3		81.1	171.1	107.5	36.3	4.8	102.4	121.8	262.4	5.8	6.4	70.5
406	Trenton		91.4	62.8		69.8	147.9	134.8	48.9	12.5	77.2	110.7	1,300.0	10.2	6.4	-----
407	Woolawaken		132.7	164.7												-----

NEW YORK.

408	Albany			27.6	71.3	74.9	140.4	136.5	36.3	8.5	95.6	127.7	501.1	4.9	-----	84.1
409	Albion		165.4	16.9		67.6	129.5	136.5	23.6	10.5	75.3	111.4	83.3	34.6	58.5	87.8
410	Amherst		97.7	26.4		79.4	155.0	151.4	30.2	4.2	110.1	138.7	205.6	10.4	10.2	84.1
411	Batavia		106.2	32.0		69.2	131.4	139.6	33.7	5.0	87.6	126.6	135.0	6.7	8.4	64.1
412	Binghamton		140.6	125.5		73.8	145.4	182.5	33.9	6.3	101.0	136.8	491.5	1.9	1.9	58.2
413	Brooklyn					66.2	129.0	144.3	44.3		73.9	111.6	-----	1.9	1.4	-----
414	Buffalo		76.7	28.4		64.6	125.0	93.7	30.1	6.9	108.8	160.0	250.0	7.0	7.7	70.3
415	Canandaigua		146.0	110.1		68.0	129.2	142.3	29.8	14.3	92.9	163.5	425.0	6.9	-----	-----
416	Cashier			24.6		56.8	118.9	-----	40.0	15.4	-----	-----	-----	-----	-----	-----

* Statistics of 1880-87.

TABLE 25.—Comparative Statistics, for 1887-88, of Enrolment, Attendance, Teachers, and Sittings in Common Schools, etc.—Continued.

City or Town.	1	2	Ratio of Public School En-rolment to Population 6-14.	Ratio of Private School En-rolment to Total Public Enrolment.	Ratio of Average Attendance to—		Average Number Days At-tendance of Each Person Enrolled.	Total Attendance is Equiva-lent to Attendance of Each Person between 6 and 14 for—	Number of Pupils in Average Attendance to Each Teacher.	Ratio of Male Teachers to Whole Number of Teach-ers.	Number of Sit-tings to—		Average Number of Sittings to a Building.	High Schools.			Ratio of Average At-tendance to Enrol-ment.	
					Population 6-14.	Enrolment.					11.	12.		13	14	15		16
NEW YORK—continued.																		
Cohoes	109.4	Per cent.	78.0	Per cent.	52.9	67.9	137.1	106.9	43.0	4.1	74.4	109.6	209.9	Per cent.	1.1	Per cent.	91.1	
Corning*	159.6	Per cent.	159.6	Per cent.	92.3	57.8	120.2	191.7	34.3	4.2	101.7	176.0	483.3	Per cent.	7.9	Per cent.	91.1	
Corland	83.4	Per cent.	79.7	Per cent.	46.2	57.9	111.1	88.5	34.0	9.1	89.8	155.1	197.8	Per cent.	12.7	Per cent.	70.8	
Dansville	145.9	Per cent.	106.7	Per cent.	53.3	50.0	93.1	99.3	30.9	9.1	95.6	191.2	630.0	Per cent.	16.6	Per cent.	70.8	
Dunkirk	114.3	Per cent.	82.6	Per cent.	61.6	74.6	144.8	119.6	23.7	5.0	126.0	168.8	177.8	Per cent.	7.5	Per cent.	66.3	
Elmira	133.6	Per cent.	132.7	Per cent.	83.4	64.3	124.6	165.3	30.3	6.6	73.5	114.3	150.0	Per cent.	11.5	Per cent.	63.8	
Elmira	150.0	Per cent.	130.9	Per cent.	93.1	71.1	139.5	182.5	35.8	7.1	86.9	122.2	497.1	Per cent.	4.3	Per cent.	97.4	
Flushing*	82.6	Per cent.	57.0	Per cent.	39.5	69.2	136.1	77.6	30.2	4.3	99.7	144.1	333.3	Per cent.	11.0	Per cent.	97.4	
Geneva	174.1	Per cent.	138.4	Per cent.	118.2	85.4	169.1	234.0	46.8	13.0	103.2	120.8	325.0	Per cent.	44.1	Per cent.	83.8	
Gloversville	141.3	Per cent.	141.3	Per cent.	93.9	66.4	129.5	183.0	43.7	3.7	79.1	119.0	468.0	Per cent.	7.2	Per cent.	62.2	
Green Island	152.2	Per cent.	146.9	Per cent.	86.8	59.1	118.1	173.4	40.9	7.1	80.5	136.2	389.5	Per cent.	10.1	Per cent.	80.5	
Herkimer	137.7	Per cent.	137.7	Per cent.	87.9	63.8	123.8	170.4	36.4	9.1	71.8	112.5	225.0	Per cent.	12.3	Per cent.	80.5	
Hoosick Falls	156.7	Per cent.	156.7	Per cent.	123.2	78.4	145.5	227.9	36.9	14.8	102.5	130.6	433.3	Per cent.	6.5	Per cent.	85.4	
Hornellsville	131.9	Per cent.	131.9	Per cent.	95.1	72.1	139.9	184.4	38.8	2.9	183.5	122.6	453.3	Per cent.	6.8	Per cent.	64.3	
Hudson	166.4	Per cent.	166.4	Per cent.	132.5	65.5	129.2	258.4	33.2	7.7	113.9	174.0	750.0	Per cent.	23.7	Per cent.	84.0	
Ilion	158.3	Per cent.	158.3	Per cent.	92.3	71.4	136.3	176.4	36.5	8.0	102.8	144.0	306.8	Per cent.	20.3	Per cent.	84.0	
Unadilla	129.4	Per cent.	129.4	Per cent.	88.7	60.3	125.3	167.0	26.7	3.2	87.5	132.2	247.6	Per cent.	8.2	Per cent.	62.2	
Jamestown	143.2	Per cent.	143.2	Per cent.	83.8	70.2	137.0	163.0	40.9	0	100.0	132.7	428.0	Per cent.	10.3	Per cent.	62.7	
Johnstown	119.4	Per cent.	119.4	Per cent.	83.8	70.2	137.0	163.0	40.9	0	100.0	132.7	428.0	Per cent.	10.3	Per cent.	62.7	
Kingston	138.3	Per cent.	138.3	Per cent.	83.8	70.2	137.0	163.0	40.9	0	100.0	132.7	428.0	Per cent.	10.3	Per cent.	62.7	
Lansburg	96.2	Per cent.	96.2	Per cent.	67.1	69.7	131.8	126.8	30.0	2.8	83.3	119.4	355.0	Per cent.	14.9	Per cent.	65.9	
Little Falls	119.6	Per cent.	103.2	Per cent.	90.5	87.7	171.0	176.5	45.9	16.7	106.8	145.1	454.0	Per cent.	6.0	Per cent.	93.1	
Lockport	108.5	Per cent.	108.5	Per cent.	73.6	73.6	143.6	136.8	36.9	7.7	106.8	145.1	454.0	Per cent.	12.3	Per cent.	93.1	
Long Island City	109.6	Per cent.	109.6	Per cent.	71.9	66.3	126.1	136.8	41.3	2.7	66.8	100.8	300.0	Per cent.	0	Per cent.	93.1	
Lyons	146.3	Per cent.	146.3	Per cent.	108.3	74.0	143.5	208.8	40.9	2.0	101.7	137.3	900.0	Per cent.	0	Per cent.	900.0	
Malone	142.6	Per cent.	142.6	Per cent.	100.8	70.7	137.4	195.9	37.8	4.2	93.5	132.3	120.0	Per cent.	15.1	Per cent.	90.7	
Medina	162.5	Per cent.	162.5	Per cent.	94.6	58.3	114.8	156.4	31.7	10.0	95.8	164.5	256.3	Per cent.	15.1	Per cent.	90.7	

445	Middletown*	144.3	133.0	3.7	92.6	66.6	135.5	188.4	38.6	5.7	83.9	126.0	212.8	13.9	19.4	.....
446	Mount Vernon	141.1	131.6	6.7	90.7	68.9	129.8	170.8	34.2	7.7	103.3	149.9	500.0	0	0	.....
447	New Rochelle	108.0	86.6	19.9	54.9	63.5	127.0	109.9	33.6	5.3	79.4	125.2	266.7	0	0	.....
448	New York	147.6	112.6	22.8	73.1	64.9	124.6	140.3	30.8	13.1	84.1	129.5	1,534.3	.....	.....	.....
449	Newburg	132.7	96.6	27.2	69.6	72.1	142.0	137.1	32.9	9.9	88.3	122.5	477.3	5.1	5.0	59.2
450	Ogdensburg*	131.2	94.0	28.3	65.7	69.1	122.5	124.6	34.4	16.7	113.3	162.1	200.9	.....	.....	68.8
451	Olean	140.0	93.1	.....	86.4	63.1	118.4	165.8	33.6	6.5	84.9	136.7	284.4	4.7	6.6	68.8
452	Oswego	133.2	93.1	26.0	63.8	70.4	133.8	132.6	37.2	3.0	92.9	131.3	244.3	6.3	6.2	70.3
453	Owego	.....	.....	17.6	63.8	78.8	150.9	.....	24.6	6.7	121.6	204.5	.....	27.3	6.3	78.1
454	Penn Yan	.....	.....	21.3	80.2	59.5	116.0	.....	25.9	11.8	121.6	204.5	.....	33.4	.....	80.2
455	Plattsburgh*	117.3	109.2	6.9	80.2	74.0	137.0	149.6	31.8	3.2	89.7	122.1	290.8	6.4	6.9	.....
456	Port Clinton	111.4	81.0	27.2	55.7	63.7	131.3	106.4	34.4	8.3	81.2	122.5	566.0	0	0	.....
457	Port Jervis	133.3	120.1	3.1	89.3	69.2	134.4	173.5	37.0	5.7	88.6	128.7	333.8	8.3	10.7	87.8
458	Poughkeepsie	123.2	96.9	21.4	69.2	71.4	138.6	134.2	29.1	2.8	89.6	125.5	299.5	6.4	6.2	80.2
459	Rochester	.....	.....	.....	.....	73.0	147.0	.....	32.2	4.4	86.5	115.4	438.7	4.4	.....	80.8
460	Rome*	134.0	135.1	13.6	81.0	63.1	119.3	138.7	32.6	8.1	93.9	148.9	224.5	9.1	12.1	73.9
461	Saratoga Springs	165.5	160.0	3.3	105.3	65.9	123.3	200.4	32.0	9.0	85.5	135.4	213.8	6.0	10.5	63.5
462	Seneca Falls	149.5	109.7	26.7	73.3	72.3	143.9	137.8	35.8	4.4	80.7	112.9	283.3	12.7	14.0	80.7
463	Sing Sing	145.7	116.4	20.1	83.2	71.5	136.5	168.5	35.8	6.8	95.4	124.4	431.2	5.4	5.2	73.5
464	Syracuse	117.9	96.5	18.2	74.0	76.7	149.5	144.4	36.3	3.8	112.3	166.1	266.7	11.9	13.0	77.0
465	Tarrytown	113.7	101.1	.....	71.1	62.6	119.8	136.1	37.7	14.3	75.8	120.9	312.5	0	0	.....
466	Tonawanda	132.8	101.1	23.9	57.2	56.6	111.0	112.2	41.7	15.4	81.5	143.9	780.0	7.2	7.3	63.3
467	Troy*	.....	.....	22.8	68.3	68.3	133.1	.....	33.6	11.0	94.4	138.3	500.0	2.5	.....	.....
468	Utica	108.8	90.1	17.2	65.5	72.7	141.7	127.8	28.9	3.7	79.6	109.5	256.1	3.1	2.8	85.1
469	Watertown	130.6	119.7	8.3	70.5	58.9	117.3	140.4	23.8	11.1	87.6	148.7	257.3	12.8	15.4	83.2
470	Waterloo	149.2	136.6	8.4	88.1	64.4	126.3	172.5	29.2	22.2	117.2	228.4	300.0	12.3	16.8	.....
471	Watertown	119.3	109.3	8.6	73.9	65.1	135.7	148.3	27.3	3.8	112.3	166.1	266.7	11.9	13.0	77.0
472	West New Brighton*	123.7	103.6	19.5	64.9	62.7	123.5	127.8	34.5	13.3	75.8	120.9	312.5	0	0	.....
473	White Plains	.....	.....	12.9	63.1	63.1	118.6	.....	36.2	10.0	82.1	130.1	471.0	4.8	3.1	.....
474	Yonkers	107.9	65.8	39.0	44.4	67.4	130.2	85.6	37.8	7.4	82.5	122.3	357.1	.....	.....	.....
NORTH CAROLINA.																
475	Durham	.....	.....	.....	29.6	84.1	151.3	58.4	31.7	46.7	147.5	175.4	250.0	.....	.....	.....
476	Fayetteville	56.1	35.3	37.1	61.0	78.6	141.4	109.9	61.1	22.2	18.2	100.0	306.0	0	0	.....
477	New Bern*	99.9	87.8	22.2	56.0	63.8	163.8	91.1	39.3	22.0	61.3	106.7	200.0	3.3	84.0	.....
478	Raleigh	138.2	112.1	18.9	48.9	43.6	68.0	76.3	37.5	50.0	46.5	106.7	200.0	2.9	3.3	.....
479	Roseville	.....	95.8	.....	67.6	70.6	120.1	115.0	45.1	44.4	86.8	122.9	499.0	.....	.....	.....
480	Winston	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
OHIO.																
481	Akron	135.0	111.9	17.1	87.6	78.3	151.1	169.1	40.5	6.7	93.0	119.1	394.5	7.8	8.8	73.7
482	Alliance	141.4	129.3	8.6	96.1	74.3	142.7	181.4	37.4	9.1	88.5	119.2	293.8	7.2	9.4	76.0
483	Ashtabula	.....	.....	.....	.....	71.4	128.6	.....	44.4	17.6	88.8	127.2	209.3	5.9	.....	77.8
484	Bellare	122.4	100.1	18.2	68.9	68.9	119.8	120.0	41.1	9.4	82.4	119.7	262.5	8.1	8.1	84.5
485	Bellefontaine	152.0	128.3	15.5	88.7	66.0	118.8	152.5	26.9	15.0	105.5	159.8	286.7	6.3	8.0	80.4
486	Bucyrus	132.1	110.9	9.3	83.8	69.9	132.8	159.2	41.8	5.6	93.3	132.8	1,000.0	5.1	6.1	76.4
487	Canton*	131.6	105.6	19.0	78.9	74.1	142.2	151.5	41.3	16.9	.....	.....	.....	2.7	2.7	.....
488	Chillicothe	103.0	89.2	13.3	70.0	78.4	145.8	130.2	32.6	6.4	99.6	127.1	339.2	5.9	5.3	80.9

* Statistics of 1896-97.

TABLE 25.—*Comparative Statistics, for 1887-88, of Enrolment, Teachers, and Sitzings in Common Schools, etc.—Continued.*

[illegible]

517	Piqua.....	70.1	59.6	75.3	135.6	107.9	35.4	12.0	111.8	148.4	328.8	5.2	4.5	87.3
518	Portsmouth.....	103.4	86.9	69.9	133.1	115.7	35.2	7.1	106.6	146.7	265.0	8.7	10.4	83.1
519	Rayona.....	135.1	86.6	72.7	138.1	161.5	31.9	17.6	106.6	146.7	265.0	8.7	10.4	83.1
520	Salmon.....	112.8	67.7	81.2	126.0	141.3	36.8	3.2	99.8	135.3	186.2	5.2	4.4	87.1
521	Sandusky.....	112.8	82.9	73.7	126.0	141.3	36.8	16.7	99.8	135.3	186.2	11.4	12.8	87.7
522	Sidney.....	112.4	70.0	78.3	146.4	133.7	35.2	14.0	98.0	120.8	375.8	2.8	2.7	84.2
523	Springfield.....	115.1	67.3	75.5	146.4	133.7	35.2	14.0	98.0	120.8	375.8	6.0	5.5	85.5
524	Stonewille.....	124.5	63.2	77.9	151.9	123.2	34.0	6.7	110.0	141.6	288.0	11.8	9.6	83.2
525	Tiffin.....	73.3	55.2	75.3	150.6	110.4	37.3	7.1	102.6	136.2	384.6	3.7	2.7	80.0
526	Toledo.....	120.2	74.0	72.9	132.6	134.7	37.9	33.3	91.7	125.8	166.7	11.8	12.0	82.9
527	Urbana.....	101.5	66.7	85.8	113.9	159.3	37.2	13.0	92.0	139.2	383.3	4.8	6.7	76.6
528	Van Wert.....	139.9	92.1	86.7	163.0	230.9	38.5	12.5	93.5	107.9	250.0	10.4	14.1	87.8
529	Washington C. H.....	135.5	117.5	90.0	157.2	184.0	35.9	7.1	109.0	138.8	293.0	11.8	13.8	87.8
530	Wesley.....	117.0	92.0	78.6	147.0	150.0	29.3	17.6	104.1	141.6	243.0	8.8	9.3	80.7
531	Xenia.....	103.6	77.7	74.1	140.8	150.0	29.3	12.3	87.9	118.7	320.6	4.3	3.2	80.7
532	Youngstown.....	87.0	70.1	86.6	153.2	136.3	33.4	9.7	106.0	131.1	560.0	8.9	4.2	81.2
533	Zanesville.....	87.0	70.1	86.6	153.2	136.3	33.4	9.7	106.0	131.1	560.0	8.9	4.2	81.2
OREGON.														
534	Astoria.....	134.4	82.0	56.9	113.3	102.8	40.8	9.1	83.9	117.5	514.3	7.1	8.1	73.5
535	Portland.....	107.0	58.7	65.1	130.2	117.4	35.9	22.4	90.7	139.4	283.3	7.1	8.1	73.5
536	Salem.....	107.0	58.7	65.1	130.2	117.4	35.9	22.4	90.7	139.4	283.3	7.1	8.1	73.5
PENNSYLVANIA.														
537	Allegheny.....	18.0	18.0	68.3	138.6	178.0	39.5	7.3	72.0	103.9	434.8	1.0	1.0	97.4
538	Allentown.....	3.5	3.5	68.0	135.1	133.7	43.3	18.2	101.6	122.2	335.0	3.7	3.7	91.4
539	Altoona.....	20.3	20.3	83.2	140.7	140.7	43.3	11.8	101.6	122.2	335.0	3.7	3.7	91.4
540	Ashland.....	9.5	9.5	67.8	122.0	178.0	48.3	15.0	84.4	124.7	300.0	4.1	4.1	82.6
541	Beaver Falls.....	156.7	112.1	71.5	113.6	178.0	37.8	2.1	87.5	122.3	403.0	1.2	1.9	95.2
542	Bellefonte.....	128.7	103.1	80.1	128.2	165.0	37.6	26.7	113.6	141.9	400.0	11.1	14.3	85.9
543	Bedford.....	20.7	103.1	72.9	144.3	165.0	40.7	21.4	99.6	124.3	432.5	5.8	5.8	87.3
544	Bethlehem.....	222.5	148.4	89.0	170.2	230.1	52.1	5.9	84.0	101.6	430.0	4.0	4.0	87.3
545	Bradford.....	11.6	11.6	72.5	130.5	178.0	41.8	0	84.0	115.9	266.7	4.0	4.0	87.3
546	Bradford.....	11.6	11.6	72.5	130.5	178.0	41.8	0	84.0	115.9	266.7	4.0	4.0	87.3
547	Bristol.....	10.9	10.9	73.5	119.7	178.0	41.0	21.7	104.8	142.5	448.3	7.9	7.9	94.8
548	Butler.....	7.2	7.2	89.7	172.4	178.0	41.3	21.4	88.2	115.8	375.5	9.2	9.2	83.9
549	Carlisle.....	9.5	9.5	89.7	172.4	178.0	41.3	30.4	103.9	138.5	320.0	6.2	6.2	88.2
550	Chambersburg.....	6.2	6.2	76.6	137.9	165.0	35.0	13.1	106.1	138.5	320.0	4.3	4.3	88.2
551	Chesler.....	13.6	13.6	62.9	122.6	165.0	33.4	0	82.6	122.5	425.0	3.8	3.8	88.2
552	Columbia.....	23.3	84.2	74.5	143.2	165.0	33.4	6.3	103.1	122.5	425.0	4.8	4.8	88.2
553	Cornwall.....	37.0	74.5	74.5	149.0	165.0	33.6	7.1	106.2	142.6	256.7	4.8	4.8	88.2
554	Corry.....	37.0	74.5	74.5	149.0	165.0	33.6	7.1	106.2	142.6	256.7	4.8	4.8	88.2
555	Danville.....	0	0	65.6	118.0	165.0	31.3	13.3	48.8	74.5	70.0	8.2	8.2	78.0
556	Du Bois.....	0	0	70.7	95.4	165.0	40.9	44.4	110.3	156.0	320.0	4.9	4.9	80.1
557	Dunmore.....	2.5	2.5	68.0	135.9	165.0	34.8	8.7	50.0	130.9	116.7	3.9	3.9	80.1
558	Easton.....	83.3	59.0	77.2	134.5	165.0	27.9	21.1	113.2	146.6	275.8	5.0	5.0	81.2
559	Elric.....	83.3	59.0	77.2	134.5	165.0	27.9	3.7	79.9	112.8	221.1	6.1	6.1	81.2
560	Greenville.....	0	0	80.9	129.5	165.0	34.7	27.3	106.0	131.1	560.0	8.9	8.9	84.5

* Statistics of 1880-87.

TABLE 25.—Comparative Statistics, for 1887-88, of Enrolment, Attendance, Teachers, and Sittings in Common Schools, etc.—Continued.

City or Town.	Ratio of Total Public and Private School Enrolment to Population 6-14.	Ratio of Public School Enrolment to Population 6-14.	Ratio of Private School Enrolment to Total Public Enrolment.	Ratio of Average Attendance to—		Average Number Days Attendance of Each Person Enrolled.	Total Attendance is Equivalent to Attendance of Each Person Between 6 and 14 for—	Number of Pupils in Average Attendance to Each Teacher.	Ratio of Male Teachers to Whole Number of Teachers.	Number of Sittings to—		Average Number of Sittings to a Building.	High Schools.		
				Population 6-14.	Enrolment.					Each 100 pupils Enrolled.	Each 100 pupils in Average Attendance.		Ratio of Enrolment to—	Ratio of Average Attendance to Enrolment.	Per cent.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.		Days.		Per cent.				Per cent.	Per cent.	Per cent.
PENNSYLVANIA—cont'd.															
561 Harrisburg.....	138.6	113.4	6.6	79.0	61.3	122.6	142.3	37.3	15.5	92.2	150.3	309.5	4.4	4.4	95.8
562 Hazleton.....	138.6	113.4	18.2	79.0	69.7	125.4	142.3	41.9	16.7	99.3	142.6	358.4	3.5	4.0	88.7
563 Honesdale.....	181.3	158.5	12.5	128.3	81.0	145.7	281.0	47.1	33.3	71.6	88.5	250.0	18.8	29.8	84.7
564 Johnston.....					76.0	136.8		40.7	20.0						82.5
565 Lancaster.....			9.6		66.0	132.0		40.8	10.5	102.1	154.8	218.2	6.2	2.1	88.4
566 Lebanon.....	172.5	147.6	14.4	131.2	88.9	160.0	286.2	49.9	18.9	101.1	113.7	262.5	4.8	7.1	88.0
567 Lewistown.....			7.6		69.6	78.5		32.5	7.7	82.9	117.2	252.0			
568 Lock Haven.....			12.7		68.8	110.0		33.0	22.2	117.7	171.2	405.0	8.1	8.1	80.4
569 McKeesport.....			24.3		70.5	127.0		41.9	4.8	90.2	127.0	450.0	3.1	3.1	82.1
570 Mahanoy.....			6.0		78.2	140.8		43.4	18.8	102.2	130.6	538.3	4.1	4.1	92.2
571 Maryland.....					78.2	140.7		31.7	2.2	112.6	144.0	330.0	8.9	8.9	78.3
572 Milton.....		157.2		108.7	63.2	124.5	195.7	35.1	18.2	100.9	143.9	281.6	11.8	18.6	71.2
573 Monongahela.....			2.7		70.3	112.4		39.0	6.3	112.6	168.3	500.0			
574 Nanticoke.....	133.5	111.5	16.5	82.1	73.6	131.1	146.2	42.4	18.2	94.2	130.0	238.8	4.3	4.8	81.8
575 New Brighton.....			8.7		71.8	129.2		44.1	5.9	86.1	120.0	450.0	4.0		88.1
576 New Castle.....			18.1		76.0	136.7		36.8	9.5	110.6	145.6	450.0	3.7		73.3
577 Norristown.....			16.6		71.6	143.3		33.8	9.4	90.9	126.8	379.2	5.8		84.7
578 Oil City.....			20.8		73.4	132.1		40.0	8.6	81.2	110.6	221.4	6.8		
579 Olyphant.....			0		80.5	144.9		40.3	25.0	125.0	155.3	166.7	12.8		86.3
580 Philadelphia.....			13.6		58.3	120.2		38.9	3.6	73.6	126.1	550.6	1.4		95.8
581 Phoenixville.....	138.3	136.5	1.3	101.0	75.7	136.3	186.1	37.4	7.1	101.2	133.7	350.0	3.5	4.8	93.9
582 Pittsburg.....			28.7		72.8	145.7		36.8	7.4	87.1	119.5	400.0	2.2		85.2
583 Pittston.....			38.4		75.2	135.4		39.4	13.0				4.2		84.0
584 Plymouth.....			20.5		65.4	135.4		42.2	28.6				2.6		85.7
585 Pottstown.....					87.0	174.5		39.0	8.0	111.6	128.3	138.9	8.5		
586 Reading.....					78.2	156.4		41.8	3.0	105.1	134.4	351.9	4.3		87.1
587 Scranton.....			14.2		67.4	134.8		36.2	9.3	72.6	107.7	250.0	2.1		79.4

588	Sharpsburg.....	78.9	141.9	35.8	10.0	100.0	127.4	453.0	2.5	80.3
589	Shenandoah.....	64.9	116.8	48.4	10.5	87.3	134.6	353.9	4.8	6.4
590	South Bethlehem.....	71.7	143.4	40.4	36.4	109.7	153.0	433.3	8.4	78.8
591	South Easton.....	85.1	170.2	43.1	36.8	104.4	122.7	373.0	10.1	81.3
592	Susquehanna.....	61.6	110.8	46.6	11.1	96.1	156.2	285.0	7.2	90.0
593	Tamaqua.....	63.1	126.4	48.6	11.8	91.8	143.3	400.0	7.3	80.8
594	Titusville.....	74.5	141.5	35.6	0	96.1	120.1	390.5	10.4	12.2
595	Tyroue.....	90.7	163.3	45.4	7.1	120.0	132.3	840.0	7.5	93.2
596	Warren.....	65.1	117.1	34.7	12.5	92.0	141.5	196.3	8.0	75.0
597	Washington.....	82.0	139.5	40.2	10.0	112.1	136.7	366.3	6.0	73.6
598	West Chester.....	62.9	121.4	30.1	4.0	90.1	143.2	359.3	3.6	91.9
599	Wilkesbarre.....	72.9	134.2	42.2	13.0	88.2	123.5	278.9	3.6	84.1
600	Williamsport.....	71.4	138.7	37.2	13.9	91.1	123.5	278.9	3.6	84.1
601	York.....	69.5	125.1	34.1	31.1	91.1	123.5	278.9	3.6	84.1
RHODE ISLAND.										
602	Bristol.....	77.0	151.1	35.1	12.5	97.7	126.8	152.6	5.2	87.5
603	Burrillville.....	56.2	101.9	28.0	0	102.3	182.1	62.2	0	0
604	Central Falls.....	53.6	100.8	49.9	4.0	61.3	114.3	285.0	0	0
605	Cranston.....	67.2	134.4	27.3	12.0	111.7	160.3	73.6	0	0
606	East Providence.....	73.7	139.5	30.6	2.9	101.3	127.0	97.1	8.1	48.6
607	Easton.....	60.6	125.0	112.0	10.3	153.2	226.1	120.0	4.4	4.0
608	Johnston.....	76.8	133.7	43.1	7.1	101.2	131.7	238.6	5.5	4.4
609	Newport.....	76.3	162.5	35.2	9.8	122.9	161.1	211.2	3.2	2.9
610	Pawtucket.....	70.9	136.2	34.5	6.2	100.3	158.6	42.6	5.6	5.4
611	Providence.....	68.9	124.0	22.9	23.1	123.8	147.8	100.0	5.0	5.4
612	South Kingstown* a.....	87.1	181.8	197.1	21.9	76.4	143.5	137.4	4.3	91.4
613	Westerly.....	53.2	98.8	34.2	9.5	76.4	143.5	137.4	4.3	66.7
614	Woonsocket.....	41.4	98.8	76.8	9.5	76.4	143.5	137.4	4.3	66.7
SOUTH CAROLINA.										
615	Charleston.....	91.6	170.9	43.7	9.1	80.1	93.9	751.5	4.8	94.4
616	Columbia.....	64.0	112.1	41.6	25.9	65.6	102.5	288.0	3.9	0
617	Greenville.....	44.4	80.0	34.0	23.2	65.6	102.5	288.0	3.9	0
TENNESSEE.										
618	Chattanooga.....	61.6	103.5	116.8	19.6	69.9	113.4	603.0	2.8	79.5
619	Clarksville.....	67.9	136.0	124.4	22.2	72.2	106.4	477.0	3.7	73.5
620	Jackson*.....	84.2	152.2	108.8	16.7	137.7	163.5	300.0	3.4	75.8
621	Knoxville.....	76.3	145.8	126.6	35.3	76.7	163.4	277.8	3.8	3.4
622	Memphis.....	67.8	100.8	66.0	13.8	103.9	125.9	420.0	3.9	2.6
623	Union City.....	84.1	134.7	142.6	33.3	103.9	125.9	420.0	0	0
TEXAS.										
624	Austin.....	75.0	127.5	172.3	15.7	91.2	121.6	137.5	4.5	74.3
625	Breunton.....	57.6	109.4	87.2	26.3	103.8	180.3	270.0	6.3	73.5

* Statistics of 1886-87. a Owing to local difficulties following the division of the town by the State Legislature, the affairs of the schools are in an unsettled condition, and statistics for the year 1887-88 could not be obtained.

TABLE 25.—Comparative Statistics, for 1887-88, of Enrolment, Attendance, Teachers, and Sitzings in Common Schools, etc.—Continued.

City or Town.	Ratio of Total Public and Private School Enrolment to Population 6-14.	Ratio of Public School Enrolment to Population 6-14.	Ratio of Private School Enrolment to Total Public and Private Enrolment.	Ratio of Average Attendance to—		Average Number Days Attended.	Total Attendance is Equivalent to Attendance of Each Person between 6 and 14 for—	Number of Pupils in Average Age Pupil in Each Teacher.	Ratio of Male Teachers to Whole Number of Teachers.	Number of Sitzings to—		Average Number of Sitzings to a Building.	High Schools.		
				Population 6-14.	Enrolment.					Each 100 Pupils Enrolled.	Each 100 Pupils in Average Attendance.		Total Public School Enrolment.	Ratio of Enrolment to—	Ratio of Average Attendance to Enrolment.
I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.		Days.		Per cent.				Per cent.	Per cent.	Per cent.
TEXAS—continued.															
626 Brownsville	53.4	45.6	22.0	33.9	74.5	150.5	63.6	33.1	25.0	93.8	125.9	83.3	0	0	16
627 Denison	111.9	82.1	9.7	52.9	64.4	116.0	95.3	39.9	8.7	80.8	125.4	192.0	4.6	3.7	65.7
628 El Paso	95.4	84.3	11.7	57.3	57.3	97.9	98.9	26.5	20.0	79.1	133.3	110.0	5.0	5.1	84.9
629 Fort Worth	59.1	37.0	37.4	53.6	69.5	133.0	117.1	38.5	26.8	70.5	101.4	177.8	4.7	3.9	94.9
630 Galveston	59.1	53.9	37.0	53.6	69.5	133.0	55.4	43.3	18.8	100.4	113.9	381.8	4.2	1.6	77.5
631 Houston	79.0	63.4	15.9	33.7	62.6	109.6	59.0	34.6	17.9	72.3	115.7	172.0	2.9	1.6	81.5
632 Palestine	60.6	54.1	10.3	36.3	60.7	105.7	70.2	33.7	40.0	93.7	154.7	173.3	0.7	6.5	81.5
633 Paris	102.2	71.8	29.7	36.3	67.1	120.7	65.3	38.2	17.2	86.5	129.1	337.5	0	0	71.4
634 Sherman	102.2	71.8	29.7	36.3	67.1	120.7	65.3	38.2	17.2	86.5	129.1	337.5	0	0	71.4
635 Waco	102.2	71.8	29.7	36.3	67.1	120.7	65.3	38.2	17.2	86.5	129.1	337.5	0	0	71.4
UTAH.															
636 Ogden	121.0	74.0	39.2	50.1	67.7	132.0	97.6	39.1	26.7	144.2	213.1	173.0	0	0	84.2
637 Provo City	118.2	92.4	21.9	54.2	37.0	132.0	97.6	27.0	54.5	57.2	235.7	173.0	0	0	72.7
VERMONT.															
638 Bennington	176.8	107.7	25.2	78.5	153.0	153.0	33.4	33.4	28.5	110.3	140.5	636.0	9.6	0	84.2
639 Brattleborough	176.8	107.7	25.2	78.5	153.0	153.0	33.4	33.4	28.5	110.3	140.5	636.0	9.6	0	84.2
640 Rockingham	176.8	107.7	25.2	78.5	153.0	153.0	33.4	33.4	28.5	110.3	140.5	636.0	9.6	0	84.2
641 Rutland	176.8	107.7	25.2	78.5	153.0	153.0	33.4	33.4	28.5	110.3	140.5	636.0	9.6	0	84.2
642 St. Johnsbury	176.8	107.7	25.2	78.5	153.0	153.0	33.4	33.4	28.5	110.3	140.5	636.0	9.6	0	84.2
VIRGINIA.															
643 Alexandria	78.7	60.2	23.6	44.0	73.1	143.2	86.2	42.3	25.0	83.2	113.7	337.5	0	0	78.3
644 Fredericksburg	97.9	90.9	7.2	80.8	88.9	165.0	150.0	59.5	16.7	83.3	93.8	167.5	3.6	3.4	78.3

645	Lynchburg	102.7	38.4	1.4	67.9	76.9	148.3	131.1	40.3	27.1	87.3	113.6	270.0	6.8	6.0	77.6
646	Norfolk	110.1	67.2	3.9	38.7	57.6	106.0	71.2	53.1	19.3	72.4	135.6	295.7	6.8	5.4	82.9
647	Petersburg	95.3	80.6	15.4	56.1	69.5	104.3	84.1	48.6	8.5	73.1	105.2	207.2	6.9	5.3	73.4
648	Richmond	101.7	90.1	11.4	83.0	83.0	135.3	139.9	43.0	13.8	94.8	114.1	572.0	6.8	6.4	92.5
649	Staunton	148.0	94.4	36.2	69.5	73.6	136.3	136.3	35.5	33.3	118.6	161.0	600.0	6.8	8.7	88.2
650	Winchester	57.9	80.3	8.7	57.9	72.1	133.6	107.3	47.3	33.3	101.8	141.1	400.0	10.8		
WASHINGTON.																
651	Tacoma	205.1	163.9	17.6	105.2	62.3	190.2	203.0	32.3	7.4	96.4	154.8	225.0	0	0	
652	Walla Walla	206.1	138.1	23.3	91.5	57.9	115.8	183.1	40.9	14.3						
WEST VIRGINIA.																
653	Charleston*															
654	Grafton	122.7	109.8	14.9	83.0	75.6	120.9	132.8	40.6	13.0	81.4	107.7	250.0	7.0	7.7	88.3
655	Marionburg	146.7	112.2	23.5	99.3	88.5	171.6	192.6	56.1	27.3	100.0	132.8	232.0	12.4	13.9	78.0
656	Parkersburg	103.7	90.7	10.7	86.6	95.6	198.2	170.7	41.9	22.5	96.9	101.4	340.0	4.4	4.0	88.5
657	Wheeling	85.1	74.0	13.1	53.9	50.0	159.3	117.9	33.6	5.4	107.3	132.7	454.5	0	0	
WISCONSIN.																
658	Appleton	155.0	122.7	20.3	52.2	80.0	117.8	144.5	38.9	10.6	115.0	142.2	325.0	8.5	10.4	71.9
659	Baraboo	173.4	173.0	3.0	110.9	67.6	120.4	208.2	34.1	5.3	83.4	123.5	266.7	5.7	9.9	83.6
660	Beloit	148.6	148.6		96.7	98.8	130.2	193.5	35.0	9.5	141.5	217.4	400.0	7.4	11.0	69.0
661	Berlin	145.0	115.8	20.2	98.8	85.4	130.1	150.6	33.8	10.0	128.8	156.9	255.0	11.5	13.3	
662	Chippewa Falls	131.8	78.4	40.5	55.5	70.8	124.0	97.2	29.3	4.2	100.8	142.4	1466.7	11.9	9.3	60.2
663	Fond du Lac	108.3	88.7	18.1	61.6	63.4	135.4	120.1	34.0	2.2	109.4	157.6	129.9	6.4	5.7	71.5
664	Fort Howard	121.1	116.3	4.0	105.0	90.3	171.5	169.4	44.7	5.9	101.0	111.8	141.7	7.4	8.6	82.3
665	Green Bay	128.3	84.2	34.4	59.9	71.2	140.0	117.9	32.6	4.0	113.5	155.5	216.7	6.4	5.4	65.8
666	Janesville*	105.3	76.4	27.4	55.1	72.1	123.6	94.5	29.4	5.1	114.6	159.0	303.3	11.5	8.6	
667	Kenosha*	141.8	74.9	47.2	50.5	67.4	128.0	95.9	28.3	6.3	104.2	174.5	175.0	11.5	5.0	
668	La Crosse	143.2	109.2	26.3	74.2	67.9	134.3	146.6	36.6	11.5	88.0	124.6	284.2	4.4	4.8	76.2
669	Madison	102.9	84.5	17.9	68.1	80.6	149.2	124.0	35.3	4.8	97.9	121.5	290.0	15.5	13.1	87.7
670	Monomonic	142.8	142.8		102.9	72.1	129.6	185.1	34.8	12.0	94.4	131.1	162.9	9.6	13.7	72.4
671	Merrill	150.4	138.6	7.8	70.8	57.5	101.9	141.2	36.0	6.7	85.3	148.1	200.0	8.2	11.4	64.9
672	Milwaukee		81.0		58.6	63.8	136.7	110.7	40.3	13.4	81.2	116.4	606.1	20.1	1.7	73.7
673	Monroe	182.7	182.7							5.9				10.9	10.3	85.9
674	Neenah	81.1	81.1	21.3	83.5	91.1	182.2	177.1	41.0	5.6	108.3		100.0	11.0	18.9	96.4
675	Oconto	103.0	97.2				143.3	136.0		13.3	144.4	158.5	243.8	10.8	10.5	
676	Oshkosh	62.8	62.8											12.9	8.1	41.6
677	Portage	133.9	111.6	10.6	68.1	61.0	122.0	136.2	30.9	5.3	125.6	206.1	222.0	14.5	14.5	72.8
678	Racine	111.7	82.9	25.8	62.1	74.9	149.6	124.1	39.9	18.8	90.3	132.5	375.0	4.4	3.6	83.6
679	Shelbygan	113.4	72.3	36.3	46.2	61.0	125.6	90.8	44.1	25.0	108.7	169.9	350.0	3.4	2.5	
680	Stevens Point*	123.6	111.5	13.3	95.2	85.4	162.2	139.9	92.6	4.8	45.0	52.7	170.8	3.2	3.6	
681	Watertown	117.5	67.6	42.5	143.9	71.9	143.9	136.5	36.5	12.5	91.9	127.8	224.0	11.2	9.6	69.9
682	Waukegan	164.4	146.1	12.3	100.2	68.6	126.9	185.4	37.7	6.7	97.1	141.5	266.7	11.2	16.3	73.9
683	Wausau	94.9	94.9	25.2	57.8	60.9	109.6	194.1	34.8	7.7	85.9	141.0	141.9	4.5	4.3	76.1
WYOMING.																
684	Cheyenne			14.3		65.2	120.3		25.6	4.5	99.5	152.3	286.7	6.6		73.0

* Statistics of 1886-87.

TABLE 26.—Summary, by States, Geographical Divisions, and Classes according to Population, of Comparative Statistics of Enrolment, Attendance, Teachers, and Sittings, in Schools of Cities and Towns containing over 4,000 Inhabitants.

State or Territory.	Ratio of Total Public and Private School Enrollment to Population 6-14.	Ratio of Public School Enrollment to Population 6-14.	Ratio of Private School Enrollment to Total Public Enrollment.	Ratio of Average Attendance to—		Average Number Days Attendance of Each Person Enrolled.	Equivalent to Attendance 6 and 14 for— Days.	Number of Pupils in Average Attendance to Each Teacher.	Ratio of Male Teachers to Whole Number of Teachers.	Number of Sit-tings to—			Average Number of Sittings to a Building.	High Schools.			
				Population 6-14.	Enrollment.					Each 100 Pupils Enrolled.	Each 100 Pupils in Average Attendance.	Per cent.		Per cent.	Per cent.	Ratio of Enrollment to—	Ratio of Average Attendance to Enrollment.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Alabama	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	121.7	84.0	40.4	Per cent.	101.0	130.4		Per cent.	Per cent.	Per cent.		
Arizona	104.2	95.6	8.2	72.8	76.1	139.4	133.3	42.7	29.3	87.9	115.6	340.6	3.9	3.7	84.3		
Arkansas	121.4	63.3	23.8	51.1	80.0	152.9	97.9	46.4	12.9	91.9	114.8	457.3	5.9	3.7			
California	98.6	88.6	17.2	58.0	65.4	113.8	100.3	44.5	15.3	97.1	146.4	252.8					
Colorado	99.1	82.7	16.6	59.1	71.5	141.0	116.7	37.0	7.3	76.1	140.4	317.2	3.0	2.6			
Connecticut	142.1	142.1	14.5	83.8	83.8	97.6	138.8	33.7	16.3	101.8	172.5	316.7	3.9	5.5			
Dakota	135.3	116.0	14.5	78.1	70.0	97.6		31.3	11.2	92.2	140.6	172.1		7.0			
Delaware	134.2	126.2	5.9						4.6				5.5				
District of Columbia	104.2	95.6	8.2	72.8	66.9	130.8		35.5	1.2	86.9	130.0	295.5					
Florida			23.8		71.9	139.4	133.3	42.7	9.7	87.9	115.6	340.6	3.9	3.7	84.3		
Georgia				51.1	80.0	152.9	97.9	46.4	12.9	91.9	114.8	457.3	5.9	3.7			
Illinois	121.4	83.3	31.8	61.9	71.6	142.6	119.1	39.1	6.7	92.3	124.7	320.9	4.2	2.3			
Indiana	90.2	72.3	20.6	54.7	73.8	139.2	100.4	35.9	12.3	94.5	124.6	325.9	6.7	5.2	83.5		
Iowa	123.7	104.1	16.0	71.7	68.9	128.3	133.5	33.6	8.9	90.9	132.0	282.1	6.4	6.7	82.9		
Kansas	125.9	106.1	15.8	73.7	69.5	119.5	126.8	34.0	15.8	90.3	130.0	282.2	4.8	5.0	82.1		
Kentucky	79.8	65.2	13.0	49.3	72.7	145.8	105.9	39.0	5.4	93.3	122.4	352.7					
Louisiana					61.7	111.7		38.8	6.8								
Maine	126.1	108.5	15.6	88.6	80.2	144.3	159.5	30.7	11.4	89.0	141.0	592.4	8.3	9.0	90.0		
Maryland		101.3		63.1	63.1	126.8	128.4	33.5		104.3	135.9	160.0	2.6	2.5	84.5		
Massachusetts	132.9	115.8	13.7	89.5	77.4	118.1	169.2	34.5	10.0	104.3	135.9	160.0	5.8	6.7	83.8		
Michigan	114.5	89.7	22.5	62.5	72.3	138.6	127.8	35.4	5.5	94.3	134.8	319.1	6.8	6.2	74.6		
Minnesota			19.0		68.6	129.0		31.3	5.6	108.8	158.3	377.2	5.0		76.5		
Mississippi	108.0	76.8	27.5	51.0	66.4	111.9	85.9	46.1	9.4	101.2	150.9						
Missouri	97.3	77.9	23.3	50.1	67.0	121.3	87.7	37.5	11.2	85.0	126.8	389.4	3.6	4.3	80.0		
Montana	140.9	138.1	6.0	75.3	54.5	101.4	140.0	32.5	12.1	94.1	172.5	142.3	3.4	4.6	69.7		
Nebraska	124.2	113.0	9.8	78.0	69.1	129.1	145.9	36.6	6.8	88.9	128.7	231.5	4.8	5.4	77.7		
Nevada	123.4	112.0	9.2	93.8	83.8	129.1	145.9	32.4	10.0	121.7	145.3	400.6	7.4	9.4	87.7		

28	New Hampshire.....	131.2	103.7	33.4	76.4	73.3	135.3	138.4	30.2	6.4	111.4	149.2	99.6	8.2	0.4	85.9
29	New Jersey.....	181.6	181.6	23.3	63.4	63.4	131.3	107.3	39.7	7.1	77.0	117.0	427.5	3.2	2.6	.....
30	New York.....	137.4	107.0	22.8	71.1	66.8	137.3	137.3	36.5	10.1	84.4	126.3	630.1	4.5	5.9	.....
31	North Carolina.....	83.0	83.0	.....	54.1	65.2	109.4	90.8	41.8	31.0	72.2	114.1	311.6	.....	.....	.....
32	Ohio.....	120.5	89.6	35.7	69.0	77.1	146.6	131.2	37.5	10.4	103.7	134.8	431.8	5.5	5.2	82.2
33	Oregon.....	138.4	109.5	13.4	76.9	68.5	136.3	162.9	36.8	11.6	85.2	121.1	415.0	.....	.....	.....
34	Pennsylvania.....	.....	.....	16.1	66.4	66.0	128.9	.....	38.8	7.9	81.9	124.6	388.4	2.7	.....	80.5
35	Rhode Island.....	117.9	95.6	18.9	66.4	69.9	135.2	127.9	32.3	8.4	102.1	149.4	120.9	.....	.....	.....
36	South Carolina.....	.....	.....	31.4	78.1	78.1	143.7	.....	42.2	13.5	80.9	95.5	566.1	3.8	.....	94.4
37	Tennessee.....	101.1	81.6	17.6	57.1	69.9	118.5	96.7	48.8	21.5	82.8	116.6	379.5	3.4	2.8	77.5
38	Texas.....	78.4	61.6	25.5	43.5	70.5	126.0	77.6	36.6	19.4	86.6	122.4	207.6	4.0	2.6	81.1
39	Utah.....	119.7	81.8	31.7	43.3	52.9	.....	.....	34.0	38.4	116.5	220.7	.....	.....	.....	.....
40	Vermont.....	.....	.....	27.1	62.8	70.2	136.5	115.2	35.2	9.7	124.2	.....	104.8	6.3	.....	80.3
41	Virginia.....	101.2	82.4	18.5	62.8	70.2	136.5	115.2	35.2	17.9	88.3	115.9	383.8	5.8	5.0	77.9
42	Washington.....	205.6	164.3	20.1	99.3	60.5	118.3	194.5	41.2	9.8	.....	.....	.....	.....	.....	.....
43	West Virginia.....	100.4	84.5	15.8	71.4	81.5	163.3	138.1	38.6	13.6	101.4	120.0	337.7	3.6	3.0	82.6
44	Wisconsin.....	126.0	89.0	24.9	64.0	71.3	136.0	120.0	38.7	10.9	91.2	127.5	291.8	6.6	5.0	73.6
45	Wyoming.....	.....	.....	14.8	65.2	65.2	120.3	.....	25.6	4.5	93.5	152.8	286.7	.....	.....	70.0
.....	North Atlantic Division <i>a</i>	129.3	105.5	18.9	74.1	68.9	132.4	139.1	36.4	9.4	87.0	128.0	235.1	4.3	5.7	82.6
.....	South Atlantic Division <i>b</i>	92.1	83.9	17.3	60.9	71.9	136.2	117.1	39.6	13.5	89.3	123.8	402.4	3.7	3.2	82.9
.....	South Central Division <i>c</i>	85.8	63.5	27.6	43.6	68.7	126.2	77.6	40.4	12.0	86.3	122.8	294.7	3.3	2.1	84.2
.....	North Central Division <i>d</i>	115.9	87.1	24.5	63.3	71.9	136.1	119.2	37.1	9.2	94.5	131.0	361.7	5.2	4.8	80.1
.....	Western Division <i>e</i>	105.1	88.1	16.7	61.7	69.9	137.1	121.2	37.2	8.6	85.3	129.1	302.9	3.4	3.1	82.5
.....	Cities of first class (popu- lation 200,000 and up- ward).....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	Cities of second class (population 100,000 to 200,000).....	121.7	90.1	24.2	63.1	67.9	131.1	117.9	38.1	8.7	83.8	126.3	670.4	2.6	2.7	82.7
.....	Cities of third class (pop- ulation 50,000 to 100,000).....	89.6	73.3	19.5	48.9	68.3	133.3	94.0	37.1	7.8	83.2	123.1	513.8	3.1	2.0	86.3
.....	Cities of fourth class (pop- ulation 25,000 to 50,000).....	110.6	92.3	18.0	60.3	73.6	144.6	135.1	37.3	7.9	80.4	122.2	337.5	4.6	4.6	75.1
.....	Cities of fifth class (popu- lation 10,000 to 25,000).....	108.7	86.8	20.9	63.1	72.3	135.4	116.5	35.9	9.4	92.6	127.8	306.7	5.1	4.4	83.3
.....	Cities of sixth class (pop- ulation under 10,000).....	118.9	97.0	18.6	70.7	72.4	135.5	122.8	36.1	10.7	95.8	132.9	235.7	6.3	6.2	81.0
.....	United States.....	130.0	110.3	15.8	78.3	70.5	130.9	143.8	36.0	12.4	100.3	137.3	183.5	7.3	8.6	81.5
.....	.....	117.2	92.5	21.0	65.8	70.1	133.7	123.3	37.0	9.6	89.7	128.6	324.2	4.5	4.6	81.7

a Comprising Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania.*b* Comprising Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida.*c* Comprising Kentucky, Tennessee, Alabama, Mississippi, Louisiana, Texas, and Arkansas.*d* Comprising Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, Dakota, Nebraska, and Kansas.*e* Comprising Montana, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Idaho, Washington, Oregon, and California.

THE TABLE OF COMPARATIVE STATISTICS OF SCHOOL PROPERTY, TUITION, EXPENSES, AND RECEIPTS FROM SCHOOL TAXES.

The one great ambition that seems to control a great many of those to whose care the finances of schools are confided is to conduct those schools at the smallest possible cost. Another class—a small one, unfortunately—take pride in pointing to large appropriations as the best possible evidence of enthusiasm in school work, and boast of liberality if it appears that their schools are more expensive than those of other cities. There are, therefore, two entirely opposite standards of excellence in the matter of school finances, and the individual investigator must judge the cities whose accounts are here presented in accordance with his own ideas of the duty of the city in regard to the education of its children.

The total assessed value of property per capita of population six to fourteen is valuable mainly for its power to show the wealth of a city and the extent of its ability to support public institutions. In some cases State laws prevent liberal appropriations, and in exceptional instances other circumstances make liberality to the schools impossible, but these things are causes which it does not come within the domain of statistical tables to show. The facts only are presented; the causes for the facts must be found elsewhere. It may be well to again state in this connection that different bases of assessment greatly detract from the value of this item in comparing cities of different States.

Per capita and proportional value of school property.—In considering the matter of school property it is essential that not only the per capita value but also the proportional value be taken into consideration. It is well known that property values do not depend on the size of the city. Two cities containing precisely the same number of school children and offering exactly similar accommodations may have secured the latter at widely different prices, due to the greater value of property in one than in the other. But the greater the property value, the greater will be the ability of the city to pay the increased prices for the property needed, for tax receipts increase with property values. It does not necessarily follow, therefore, that differences, especially slight differences, in the per capita values of school property indicate different degrees of sufficiency. Nor is the proportional value alone a safe criterion, for the total valuation of property offers in itself no reliable clue to the number of school children to be provided for. It is only by taking both the per capita and proportional values (Columns 3, 4, and 5) into consideration that just conclusions can be reached.

The cost of supervision and teaching is the most reliable as well as the most important of the items of expense shown by these tables, and with a few exceptions comparisons based upon it may be made with confidence in its accuracy. Column 6 shows that the cities that pay most to teachers and supervising officers per capita of population six to fourteen are Aspen, Colo. (\$25.23); East St. Louis, Ill. (\$20.34); Oskaloosa, Iowa (\$20.63); Arlington, Mass. (\$25.87); Boston, Mass. (\$21.08); Dedham, Mass. (\$23.42); Fitchburg, Mass. (\$21.04); Hingham, Mass. (\$22.74); Medford, Mass. (\$20.70); New Bedford, Mass. (\$23.80); Waltham, Mass. (\$20.93); Watertown, Mass. (\$20.60); Winchester, Mass. (\$20.40); Duluth, Minn. (\$22.63).

The cities that pay least per capita of population six to fourteen are Eufaula, Ala. (\$1.46); Lively, Ala. (\$1.16); Augusta, Ga. (\$2.85); New Orleans, La. (\$3.53); Jackson, Miss. (\$3.14); Washington, Mo. (\$3.26); Fayetteville, N. C. (\$3.43); Oconto, Wis. (\$2.25).

The most expensive systems per capita of average attendance so far as this item is concerned are those of Tucson, Ariz. (\$30.74); San Francisco, Cal. (\$25.76); Pueblo, Colo. (\$27.86); Norwich, Conn. (\$25.73); St. Paul, Minn. (\$27.76); El Paso, Tex. (\$26.65); Cheyenne, Wyo. (\$23.59).

The smallest amount per capita of average attendance is paid to the officers and teachers of Eufaula, Ala. (\$5.26); Lively, Ala. (\$4.90); Key West, Fla. (\$6.61); Calais, Me. (\$6.20); Eastport, Me. (\$6.69); Jackson, Miss. (\$3.55); De Soto, Mo. (\$5.52); Greenville, S. C. (\$6.97); Grafton, W. Va. (\$6.23); Martinsburg, W. Va. (\$6.34); Oconto, Wis. (\$2.54).

The amount received from city or town taxes is not a just basis for comparison except between cities and towns of the same State. In certain States the State school tax is quite heavy, while in others the schools are almost entirely supported by local taxation. As the income from the State apportionment increases, the necessity for purely local taxation decreases; and since in case of State taxes the cities usually contribute more than they receive, it is not fair to place upon the same basis amounts raised by city taxes in the States in which large State appropriations are the rule, and the amounts raised by those cities which appropriate their school moneys direct without the medium of the State treasury.

TABLE 27.—Comparative Statistics for 1887-83 of Property, Expenses for Tuition, and Receipts from Local Taxation of Public School Systems of Cities and Towns containing over 4,000 Inhabitants.

City or Town.	Total Assessed Value of Property of City or Town Per Capita of Population 6-14.	Value of School Property Per Capita of—		Ratio of Value of School Property to Total Assessed Valuation of City or Town.	Cost of Supervision and Teaching Per Capita of—		Cost of Supervision and Teaching in Mills per Dollar of Assessed Valuation.	Amount Received from City or Town Taxes Per Capita of—		Amount Raised by City or Town Tax in Mills per Dollar of Total Assessed Valuation.
		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.	
1	2	3	4	5	6	7	8	9	10	11
ALABAMA.										
				<i>Per cent.</i>			<i>Mills per dollar.</i>			<i>Mills per dollar.</i>
1 Birmingham	\$16,370	\$67.66	\$102.98	0.4	\$10.68	\$16.25	0.7	\$10.64	\$16.20	0.7
2 Enfauila	1,685	2.35	8.52	0.1	1.46	5.29	0.9			
3 Lively	290	1.74	7.37	0.6	1.16	4.90	4.0	0.29	1.23	1.0
4 Mobile		12.28	24.02							
5 Montgomery		20.16	36.58		8.15	14.78		6.53	11.85	
6 Selma					5.43	14.18		4.02	10.48	
7 Talladega	3,007	71.99	100.80	2.4	12.22	17.11	4.1	5.65	7.89	1.9
8 Tuscaloosa	1,165	21.51	62.81	1.9	4.37	12.75	3.7	2.60	7.59	2.2
ARIZONA.										
9 Tucson			240.10			30.74				
ARKANSAS.										
10 Fort Smith *	1,479	76.22	98.19	5.2	9.60	12.37	6.5			
11 Helena	1,202	31.94	115.70	2.7	4.81	17.40	4.0	4.76	17.25	4.0
12 Hot Springs *	200	14.98	22.87	7.5	8.52	13.02	42.6			
13 Little Rock	1,585	53.88	75.55	2.5	6.90	13.40	4.4	0	0	0
14 Pine Bluff		14.92	24.77		6.71	11.15				
15 Texarkana		31.50	35.03		10.60	11.78		7.16	7.96	
CALIFORNIA.										
16 Los Angeles	5,358	59.21	98.46	1.1	14.08	23.41	2.6	7.37	12.26	1.4
17 Marysville	3,025	26.97	45.70	0.9	13.91	23.57	4.6	7.56	12.81	2.5
18 Oakland *	4,155	53.82	70.02	1.3	18.83	24.50	4.5	7.73	10.06	1.8
19 Sacramento	2,345	59.75	93.26	2.1	15.60	24.34	5.5	5.38	8.40	1.9
20 San Francisco	4,727	60.65	111.12	1.3	14.06	25.76	3.0	5.75	10.54	1.2
21 San José		75.02	103.10		14.65	20.12		3.61	4.97	
22 Santa Cruz	1,996	52.33	60.79	2.6	14.54	16.89	7.1	6.68	7.76	3.3
23 Santa Rosa	3,404	29.83	44.44	0.9	12.50	18.63	3.7	7.45	11.10	2.2
24 Vallejo		46.43			17.47					
25 Woodland			131.91	3.2		18.02	4.4		7.73	1.9
COLORADO.										
26 Aspen	4,318	69.51	64.97	1.6	25.28	23.63	5.9			
27 Leadville		122.53	153.10		14.04	17.54				
28 Pueblo		174.02	218.00		22.24	27.86				
CONNECTICUT.										
29 Bridgeport*	2,593	51.53	61.14	2.0	11.33	13.44	4.4	11.58	13.74	4.5
30 Bristol	2,618	61.46	63.34	2.4	17.23	18.65	6.6	15.50	16.73	5.9
31 Derby	1,895	56.99	73.53	3.0	12.01	15.49	6.3	8.70	11.23	4.6
32 East Hartford	2,890	47.69	54.05	1.7	11.46	13.01	4.0	8.86	10.06	3.1
33 Enfield*	2,255	40.74	62.63	1.3	9.69	14.89	4.3	6.92	10.63	3.1
34 Greenwich	3,468	33.36	61.56	1.0	9.87	18.22	2.9	6.86	12.66	2.0
35 Hartford					19.28	24.46				
36 Killingly*	2,068							8.27		4.0
37 Manchester	2,515	58.19	75.11	2.3	9.05	11.68	3.6	7.48	9.63	3.0
38 Meriden		90.86	116.28		12.15	15.55				
39 Middletown	4,666	82.96	114.94	1.8	13.36	18.51	2.9	9.22	13.07	2.0
40 Naugatuck					12.60	15.52		11.16	13.74	
41 New Britain	2,610	95.47	166.45	3.7						
42 New Haven	4,182	63.65	81.64	1.6	15.65	18.61	3.7	15.20	18.03	3.6
43 New London	4,626				12.33	12.75	2.7	15.42	15.94	3.3
44 New Milford	3,722	38.15	43.01	1.0	12.02	15.13	3.2	8.79	11.06	2.4
45 Norwich		166.95	216.32		19.86	25.73		28.02	36.31	

* Statistics of 1886-87.

TABLE 27.—Comparative Statistics for 1887-88 of Property, Expenses for Tuition, and Receipts from Local Taxation of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

	City or Town.	Total Assessed Value of Property of City or Town Per Capita of Population 6-14.	Value of School Property Per Capita of—		Ratio of Value of School Property to Total Assessed Valuation of City or Town.	Cost of Supervision and Teaching Per Capita of—		Cost of Supervision and Teaching in Mills per Dollar of Assessed Valuation.	Amount Received from City or Town Taxes Per Capita of—		Amount Raised by City or Town Tax in Mills per Dollar of Total Assessed Valuation.
			Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.	
	1	2	3	4	5	6	7	8	9	10	11
CONNECTICUT—continued.											
46	Plainfield	\$2,826			<i>Per cent.</i>	\$10.09	\$14.01	<i>Mills per dollar.</i>	\$7.08	\$9.83	<i>Mills per dollar.</i>
47	Portland*	2,940	\$21.48	\$24.06	0.7	13.48	15.10	4.6	11.84	13.26	4.0
48	Putnam	1,958				6.07	15.61	3.4	4.51	10.55	2.3
49	Rockville				10.5						7.2
50	Stafford*					9.36	15.41		9.01	14.83	
51	Stamford*		143.07			11.30			13.48		
52	Stratford	1,912	66.12	75.82	3.5	12.30	14.11	6.4	12.73	14.60	6.7
53	Thomaston	3,106	66.44	72.67	2.1	11.70	12.79	3.8	12.12	13.25	3.9
54	Thompson*	3,272				6.07	12.94	1.9	3.43	7.43	1.1
55	Torrington		30.73	37.30		12.51	15.19		18.01	21.86	
56	Wallington		87.05			16.28					
DAKOTA.											
57	Fargo	3,293	164.67		5.0				12.73		3.9
58	Sioux Falls					12.39					
DELAWARE.											
59	New Castle	3,720	37.40	45.46	1.0	12.17	14.79	3.3	10.73	13.03	2.9
60	Wilmington			68.86	1.3		12.66	2.4		20.52	3.9
DISTRICT OF COLUMBIA.											
61	Washington	3,491				12.22	16.79	3.5	10.98	15.09	3.1
FLORIDA.											
62	Gainesville			22.68	1.3						
63	Key West*			21.83	0.7	6.61	2.1			17.67	5.7
64	Palatka			37.21	1.1	11.27	3.2				
65	Pensacola	1,564	9.59	17.76	0.6	4.17	7.72	2.7	6.08	11.27	3.9
GEORGIA.											
66	Americus	1,794	10.97	14.38	0.6	8.14	10.67	4.5	8.08	10.59	4.5
67	Athens			39.30	0.8		11.58	2.3		10.73	2.1
68	Atlanta	3,368	23.68	34.18	0.7				7.15	10.31	2.1
69	Augusta	2,847	6.55	24.80	0.2	2.85	10.78	1.0	4.27	16.17	1.5
70	Columbus	2,081				5.03	9.54	2.4			
71	Macon	2,971	18.16	45.30	0.6	4.91	12.26	1.7			
72	Rome*		16.09	27.46		6.81	11.62		6.59	11.25	
73	Savannah		31.54	61.26		8.62	16.74				
ILLINOIS.											
74	Aurora	1,521	62.98	86.69	3.3	10.99	15.13	7.2	11.33	15.60	7.4
75	Beardstown	1,020	61.67	85.90	6.1	9.08	12.65	8.9	11.64	16.21	11.4
76	Belleville	853	54.96	74.47	6.4	9.74	13.20	11.4	9.99	13.53	11.7
77	Belvidere	3,402	51.50		1.5				17.35		5.0
78	Bloomington	959	84.06	124.07	8.8	10.36	15.29	10.8	10.01	14.77	10.4
79	Cairo	883	27.13	46.90	3.1	4.66	8.05	5.2			
80	Canton	800	50.71	68.39	6.3	9.57	12.91	12.0	13.17	17.77	16.5
81	Centralia			35.25	4.3		9.58	11.5		16.97	20.4
82	Chicago	1,423	51.63	86.72	3.6	11.15	18.78	7.8	15.32	25.80	10.7
83	Danville	836				10.03	13.59	12.0			

*Statistics of 1886-87.

TABLE 27.—Comparative Statistics for 1887-88 of Property, Expenses for Tuition, and Receipts from Local Taxation of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Total Assessed Value of Property of City or Town Per Capita of Population 6-14.	Value of School Property Per Capita of—		Ratio of Value of School Property to Total Assessed Valuation of City or Town.	Cost of Supervision and Teaching Per Capita of—		Cost of Supervision and Teaching in Mills per Dollar of Assessed Valuation.	Amount Received from City or Town Taxes Per Capita of—		Amount Raised by City or Town Tax in Mills per Dollar of Total Assessed Valuation.
		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.	
1	2	3	4	5	6	7	8	9	10	11
ILLINOIS—cont'd.				Per cent.			Mills per dollar.			Mills per dollar.
84 Decatur.....			\$75.53	7.3		\$11.27	10.8		\$17.95	17.2
85 East St. Louis*.....	\$1,626	\$41.79	48.70	2.6	\$20.34	23.70	12.5	\$0.15	0.17	0.1
86 Effingham.....	1,383	33.70	65.00	2.4	5.44	10.49	3.9	6.91	13.33	5.0
87 Elgin.....	1,297	76.49	93.74	5.9						
88 Evanston.....	1,555	99.54	123.83	7.4	14.57	18.12	10.8			
89 Freeport.....	781	48.33	75.85	6.1	9.86	15.47	12.3	13.95	21.90	17.5
90 Galena.....	525	26.84	50.40	5.1	7.59	14.07	14.3	10.04	18.85	19.1
91 Galesburg.....	918	57.30	98.36	6.2	7.43	12.76	8.1	9.15	15.76	10.0
92 Jacksonville*.....	778	54.09	112.97	7.0	6.57	13.71	8.4	8.35	6.99	4.3
93 Jerseyville.....	953	43.84	88.98	4.6	10.23	9.10	10.7	12.71	11.30	13.3
94 Joliet.....	936	41.00	84.16	4.4	6.75	13.85	7.2	10.43	21.41	11.1
95 Kankakee.....	472	62.24	125.04	1.3	6.30	12.66	13.3	11.21	22.53	23.7
96 La Salle.....	273	13.07	45.46	4.8	3.94	13.69	14.4			
97 Lincoln.....	2,473	43.23	85.20	1.8	6.38	12.28	2.6	10.13	19.50	4.1
98 Litchfield.....	685	42.13	53.48	6.2	5.85	7.42	8.5	7.45	9.46	10.9
99 Mendota*.....		137.16	127.27		12.68	11.76		15.24	14.14	
100 Moline.....		76.45	88.06		12.02	13.84		10.03	21.93	
101 Monmouth.....		85.01	66.53		13.59	10.63				
102 Olney.....	569	53.22	52.33	9.4	7.90	7.77	13.9	8.49	8.35	14.9
103 Ottawa.....	724	38.52	52.35	5.3	10.46	14.22	14.5			
104 Paris*.....		61.90	64.58					10.97	20.83	
105 Peoria*.....	1,058	60.06		5.7	9.51		9.0	11.59		11.0
106 Peru.....										
107 Pullman.....			.63			18.11				
108 Quincy.....	809	34.14	82.13	4.2	5.92	14.27	7.3	5.92	14.25	7.3
109 Rock Island.....	1,079	50.79	63.91	4.7	11.80	14.85	10.9	17.33	21.81	16.1
110 Rockford.....	1,379	53.38	68.86	3.9	11.32	14.60	9.2	14.06	18.14	10.2
111 Springfield.....	1,254	56.83	90.27	4.5	9.75	15.49	7.8	12.55	10.93	10.0
112 Sterling.....	2,542	123.87	114.66	4.9	15.40	14.34	6.1	21.82	20.20	8.6
113 Streator*.....		30.37	39.46		6.85	9.04		8.03	10.44	
114 Waukegan*.....		53.96	75.44		0.44	13.19				
INDIANA.										
115 Anderson.....	1,493	28.37		1.9	9.86		6.6			
116 Columbus.....	1,782	61.48	65.76	3.5	9.65	10.32	5.4	7.24	7.74	4.1
117 Crawfordsville.....										
118 Elkhart.....	1,818	65.07	70.88	4.9	12.33	13.44	0.4	8.90	9.69	6.8
119 Evansville.....	2,248	48.63	93.33	2.2	8.77	16.83	3.9			
120 Fort Wayne.....	2,277	41.44	74.81	1.8	11.23	20.27	4.9			
121 Goshen.....			43.31	2.9		9.69	6.4		6.32	4.2
122 Greencastle.....	1,943	76.47	119.05	3.9	10.12	15.76	5.2			
123 Indianapolis.....	1,968	34.26	75.59	1.7	7.10	15.67	3.6	7.01	15.48	3.6
124 Jeffersonville.....	1,183	31.91	52.54	2.7	8.00	13.20	6.8	3.96	6.54	3.3
125 Kokomo.....	1,932	55.31	65.91	2.9	1.06	12.69	5.5	1.21	14.42	6.3
126 La Porte.....		34.40	72.85		7.13	15.21				
127 Lawrenceburg.....		15.32	25.29							
128 Logansport.....	1,596	64.06	93.22	4.0	7.34	10.69	4.6	0.22	0.32	0.1
129 Michigan City.....	1,415	34.75	71.25	2.5				1.04	2.12	0.7
130 Mount Vernon.....		32.65	55.48							
131 Muncie*.....		71.73	87.89		10.33	12.71		4.75	5.82	
132 New Albany.....	2,003									
133 Peru.....	1,084	58.72	75.78	5.4	9.30	11.99	8.6			
134 Richmond.....	2,725	64.09	106.17	2.4	9.82	16.23	3.6			
135 Seymour.....	1,334	37.15	45.59	2.8	8.52	10.46	6.4			
136 Shelbyville.....	2,410	39.72	44.80	1.7	8.97	10.14	3.7			
137 South Bend.....	1,496	41.81	90.06	2.8	5.95	12.83	4.0			
138 Terre Haute.....	1,907	32.22	67.96	1.7	8.41	17.75	4.5	.36	.78	0.2
139 Union City.....		50.09	65.66		10.70	14.05				

* Statistics of 1886-87.

TABLE 27.—Comparative Statistics for 1887-88 of Property, Expenses for Tuition, and Receipts from Local Taxation of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Total Assessed Value of Property of City or Town Per Capita of Population 6-14.	Value of School Property Per Capita of—		Ratio of Value of School Property to Total Assessed Valuation of City or Town.	Cost of Supervision and Teaching Per Capita of—		Cost of Supervision and Teaching in Mills per Dollar of Assessed Valuation.	Amount Received from City or Town Taxes Per Capita of—		Amount Raised by City or Town Tax in Mills per Dollar of Total Assessed Valuation.
		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.	
1	2	3	4	5	6	7	8	9	10	11
INDIANA—cont'd.				Per cent.			Mills per dollar.			Mills per dollar.
140 Valparaiso		\$41.21	\$81.48							
141 Vincennes	\$1,772	33.85	66.08	1.9	\$6.92	\$13.50	3.9	\$5.32	\$10.39	3.0
142 Washington		54.47	72.19		7.67	10.16		7.20	9.54	
IOWA.										
143 Atlantic		73.80	64.37		14.30	12.47		22.23	19.39	
144 Boone		101.79	73.81					5.68	4.12	
145 Burlington*	118	34.32	49.83	28.9	10.86	15.77	91.5	12.05	17.49	101.4
146 Council Bluffs	1,250	57.85	117.46	4.6	7.41	15.05	5.9			
147 Creston	816	81.97	86.79	10.1	11.42	12.09	14.0			
148 Davenport	907	62.98	97.00	6.9	12.46	19.19	13.7	14.86	22.88	16.4
149 Des Moines, East	1,179	81.15	87.72	6.9	12.84	13.88	10.9			
150 Des Moines, West	2,590	102.25	127.72	3.9	16.74	20.91	6.5			
151 Dubuque	1,104	39.74	72.68	3.6	7.71	14.10	7.0	9.20	16.83	8.3
152 Fort Dodge	926	66.19	77.26	7.2	11.00	12.84	11.9			
153 Iowa City*	1,075	32.53	58.29	3.0	8.65	15.51	8.0	12.37	22.17	11.5
154 Keokuk	1,326									
155 Lyons	625	42.89	66.54	6.9	7.67	11.90	12.3			
156 Marshalltown	2,076	87.55	81.58	4.2	16.91	15.75	8.1	26.24	24.45	12.6
157 Mount Pleasant					12.87	13.06				
158 Muscatine	1,185	63.30	66.93	5.3	15.41	16.29	13.0	19.51	20.63	16.5
159 Oskaloosa	1,283	120.30	114.63	9.3	20.63	19.65	16.0			
160 Ottumwa	1,405	81.76	77.30	9.3	13.31	12.58	7.0			
161 Sioux City*	2,182	70.00	152.82	3.2	5.67	12.38	2.6	8.87	19.37	4.1
162 Waterloo, East Side	2,297	50.19	75.60	2.2	11.60	17.47	5.0	16.03	24.15	6.9
163 What Cheer		22.74	23.72		9.50	9.91		13.49	14.07	
KANSAS.										
164 Atchison	1,037	40.50	73.44	3.9	6.40	11.61	6.2	7.67	13.91	7.4
165 Clay Centre	858	137.22	155.20	16.0				2.97	3.36	3.5
166 El Dorado	1,023	53.12	53.61	5.2	11.92	12.03	11.6	13.55	13.63	13.2
167 Emporia	1,724	85.05	98.37	4.9	15.13	17.51	8.8	15.41	17.82	8.9
168 Fort Scott	1,113	60.95	65.46	5.5	9.75	10.46	8.8	13.62	14.62	12.2
169 Hutchinson	2,183	63.13	65.67	3.8	11.77	9.29	5.4			
170 Independence	897	47.82	43.96	5.3	11.54	10.60	12.9	18.29	16.81	20.4
171 Kansas City*	786	26.55	56.74	3.4	5.19	11.09	6.6	8.95	19.13	11.4
172 Lawrence	945				7.78	8.64	8.2	8.13	9.04	8.6
173 Leavenworth	675	45.01	56.96	6.7	9.14	11.57	13.5	2.73	3.45	4.0
174 Marysville*	675	35.22	43.82	5.2	8.98	11.17	13.3	0	0	0
175 Newton		82.09	88.72		11.21	12.10				
176 Ottawa	944	42.28	57.39	5.1	8.56	10.18	9.1			
177 Parsons*	1,078	48.44	55.62	4.5	7.46	8.57	6.9	9.99	11.47	9.3
178 Salina	1,878	93.34	109.46	5.2	11.39	12.68	6.1			
179 Topeka	1,523	73.19	111.22	4.8	8.59	13.05	5.6	10.31	15.07	6.8
180 Wichita	2,500	55.17	92.81	2.2	7.89	13.27	3.2	13.64	22.95	5.5
181 Winfield		94.43	101.83		12.21	13.16				
KENTUCKY.										
182 Bowling Green	1,605	24.88	39.54	1.6	7.71	12.25	4.8	6.42	10.20	4.0
183 Covington	2,221	33.17	82.70	1.5	5.50	13.71	2.4	4.69	11.71	2.1
184 Dayton	1,311	26.68	41.65	2.0	5.18	8.08	3.9	6.56	10.23	5.0
185 Hopkinsville*	2,446	32.34	40.99	1.3	10.93	13.85	4.5	10.80	13.77	4.4
186 Lexington*	2,777	21.71		0.8						
187 Louisville			64.99	1.4		18.27	4.0		12.71	2.8
188 Newport	1,325	34.08	70.29	2.6	5.41	11.16	4.1	3.65	7.52	2.8
189 Owensborough	1,999	49.37	67.53	2.5	7.50	10.27	8.8	12.24	16.75	6.1

* Statistics of 1886-87.

TABLE 27.—Comparative Statistics for 1887-88 of Property, Expenses for Tuition, and Receipts from Local Taxation of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Total Assessed Value of Property of City or Town Per Capita of Population 6-14.	Value of School Property Per Capita of—		Ratio of Value of School Property to Total Assessed Valuation of City or Town.	Cost of Supervision and Teaching Per Capita of—		Cost of Supervision and Teaching in Mills per Dollar of Assessed Valuation.	Amount Received from City or Town Taxes Per Capita of—		Amount Raised by City or Town Tax in Mills per Dollar of Total Assessed Valuation.
		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.	
1	2	3	4	5	6	7	8	9	10	11
KENTUCKY—cont'd.										
190 Paducah	\$1,328	\$24.96	\$55.70	Per cent.	\$4.32	\$9.64	Mills per dollar.	\$2.65	\$5.93	2.0
191 Paris	1,220	26.24	47.36	2.2	4.21	7.60	3.5	5.31	9.59	4.4
LOUISIANA.										
192 Baron Rouge*			37.41						2.22	
193 New Orleans	2,448	13.69	45.05	0.6	3.53	11.03	1.4	3.07	10.10	1.3
MAINE.										
194 Auburn	3,010	52.21	57.78	1.7	12.43	13.81	4.1	12.23	13.53	4.1
195 Augusta	3,924	64.16	72.17	1.6	12.67	14.25	3.2	9.11	10.25	2.3
196 Bangor	3,857	50.07	46.83	1.3	12.93	12.14	3.4			
197 Bath	4,850	106.05	81.39	2.1	10.28	8.36	2.1	9.41	7.65	1.9
198 Biddeford	2,923	49.87	80.61	1.7	10.53	17.01	3.6	8.67	14.02	3.0
199 Calais		25.42	20.00		7.88	6.20		5.93	4.67	
200 Deering	4,317	130.45	122.14	3.0				12.72	11.91	2.9
201 Eastport	965	21.47	22.73	2.2	6.32	6.69	6.5	4.53	4.81	4.7
202 Gardiner	3,615	95.40	81.22	2.6	10.75	9.15	3.0	11.18	9.52	3.1
203 Lewiston*										
204 Portland	6,041	75.00	90.50	1.2	12.85	15.51	2.1	17.45	21.06	2.9
205 Rockland*	3,593	33.27		1.1	9.57		2.6	7.99		2.2
206 Saco	4,299	55.84	98.20	1.3				14.25	25.06	3.3
207 Waterville	1,979	44.36	51.99	2.2	6.83	8.00	3.4	5.10	5.93	2.6
208 Westbrook	2,292	53.32		2.3	9.04		3.9	26.54		11.6
MARYLAND.										
209 Baltimore	5,035	37.64	53.38	0.8	10.86	16.84	2.2	11.10	17.20	2.2
210 Frederick	5,260	17.88	25.29	0.3	8.43	11.92	1.6			
211 Hagerstown	1,640	19.42	40.84	1.2	4.51	9.48	2.7	0	0	0
MASSACHUSETTS.										
212 Adams	2,046				10.04	10.74	4.9			
213 Amesbury	3,609	39.73	55.75	1.1				12.63	17.72	3.5
214 Amherst	5,898	133.77	125.20	2.3	16.50	15.44	2.8	20.60	19.27	3.5
215 Arlington*		109.67	103.09		20.87	19.62				
216 Athol	4,243	45.76	42.27	1.1	12.24	11.30	2.9	14.76	13.63	3.5
217 Attleborough	3,495	23.09	23.83	0.7	13.34	13.77	3.9	21.55	22.25	6.3
218 Beverly	10,640	131.37	154.35	1.2	12.29	12.57	1.2	17.87	18.23	1.7
219 Blackstone	4,242	64.43	79.97	1.5	8.19	19.17	1.9	11.53	14.31	2.7
220 Boston					21.08	23.60		32.23	36.09	
221 Braintree	5,252	60.71	59.49	1.2	16.75	16.42	3.2	15.20	14.90	2.9
222 Brockton*	5,210				13.81	12.19	2.7	16.96	14.97	3.3
223 Brookline	27,270	221.60	220.03	0.8						
224 Cambridge	6,670				19.49	20.09	2.9	26.23	27.11	3.9
225 Chelsea	4,976	101.69	111.53	2.0	15.18	17.04	3.1	19.94	21.87	4.0
226 Chicopee	3,027	29.75	58.43	1.0	9.37	18.40	3.1	15.44	30.32	5.1
227 Clinton	3,578	159.11	162.65	4.5	13.24	13.53	3.7	18.80	19.21	5.3
228 Concord			76.26	1.2		19.33	3.1		24.61	4.0
229 Danvers	4,143	56.49	51.67	1.4	14.34	13.66	3.6	18.27	16.71	4.4
230 Dedham	6,094	88.24	80.88	1.5	23.42	21.47	3.8	29.85	27.36	4.9
231 Easthampton*	3,749	60.34		1.6	11.23		3.0	16.34		4.4
232 Everett	6,014	72.03	60.05	1.2	14.99	12.49	2.5	29.68	24.74	4.9
233 Fall River	4,480	70.93	102.71	1.5	11.15	16.14	2.5	12.29	17.79	2.7
234 Fitchburg	6,833	131.16	104.46	1.9	21.04	17.56	3.1	36.14	30.16	5.3
235 Framingham*					19.68	18.09		18.17	17.23	
236 Franklin	2,822	46.82		1.7	10.05		3.6	13.53		4.8

* Statistics of 1886-87.

TABLE 27.—Comparative Statistics for 1887-88 of Property, Expenses for Tuition, and Receipts from Local Taxation of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Total Assessed Value of Property of City or Town Per Capita of Population 6-14	Value of School Property of—		Ratio of Value of School Property to Total Assessed Valuation of City or Town.	Cost of Supervision and Teaching Per Capita of—		Cost of Supervision and Teaching in Mills per Dollar Assessed Valuation.	Amount Received from City or Town Taxes Per Capita of—		Amount Raised by City or Town Tax in Mills per Dollar Total Assessed Valuation.
		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.	
1	2	3	4	5	6	7	8	9	10	11
MASSACHUSETTS—continued.				Per cent.			Mills per dollar.			Mills per dollar.
237 Gloucester	\$3,930	\$50.14	\$57.43	1.5	\$14.22	\$13.82	3.6	\$20.94	\$20.34	5.3
238 Great Barrington ..	4,062	59.73	60.68	1.5	11.97	11.55	2.8	14.31	14.53	3.5
239 Greenfield	6,315	86.92	78.53	1.4	14.10	12.74	2.2	20.01	18.08	3.2
240 Haverhill	5,053	86.06	102.44	1.7	16.72	19.91	3.3	19.91	23.70	3.9
241 Hingham	6,872	121.68	103.37	1.8	22.74	19.32	3.3	30.21	25.67	4.4
242 Holyoke		60.59	111.48		9.83	18.13		24.63	45.31	
243 Hopkinton	3,391	39.32		1.0	12.31		3.2	16.84		4.3
244 Hyde Park	4,454	85.81	73.62	1.9	18.03	15.46	4.0	24.55	21.06	5.5
245 Lawrence	4,391	61.20	80.55	1.4	10.72	14.11	2.4	13.76	18.12	3.1
246 Leominster	5,145	66.89	59.23	1.3	19.94	17.65	3.9			
247 Lowell	6,129	64.67	89.27	1.1	15.46	21.34	2.5	19.00	26.22	3.1
248 Lynn	4,902	82.53	94.48	1.8	14.49	15.46	3.0	20.83	22.23	4.2
249 Malden	5,956	125.17	143.71	2.1	16.03	19.10	2.8	27.49	31.59	4.6
250 Marblehead	3,912	34.15	37.37	0.9	11.64	12.73	3.0	14.43	15.79	3.7
251 Marlborough	2,903	42.75	42.54	1.5	13.17	13.10	4.5			
252 Medford	6,434	106.27	96.74	1.7	20.70	18.84	3.2	25.74	23.43	4.0
253 Melrose	5,404	81.03	74.14	1.5	15.85	14.50	2.9	23.63	21.62	4.4
254 Methuen	4,455	59.12	59.12	1.3	12.87	12.87	2.9	16.53	16.53	3.7
255 Middleborough	4,324							23.60	20.22	5.5
256 Milford	3,542	43.50	51.78	1.2	11.94	14.21	3.4	15.11	17.99	4.3
257 Millbury*	2,658							12.61		4.7
258 Monson		30.40			13.13			13.49		
259 Montague	2,718	64.55	76.42	2.4	9.19	10.88	3.4	13.67	16.19	5.0
260 Nantucket		51.63	67.30		10.72	13.97		15.46	20.16	
261 Needham	5,320	129.51	98.83	2.4	18.62	14.21	3.5	25.11	19.16	4.7
262 New Bedford	9,831	145.88	131.92	1.5	23.81	21.52	2.4	31.64	28.61	3.2
263 Newburyport	4,028	49.73	84.85	1.2	9.99	16.02	2.3	10.24	17.46	2.5
264 Newton		187.36	173.25							
265 North Adams	2,418	60.62	76.72	2.5	10.14	12.83	4.2	13.33	16.87	5.5
266 North Brookfield ..	2,812	54.39	54.58	1.9	11.81	11.85	4.2	13.60	13.64	4.8
267 Northampton	4,855	77.57	79.29	1.6	13.88	14.18	2.9	24.10	24.64	5.0
268 Northbridge	3,816	118.76	113.16	3.1	14.40	13.69	3.8	18.41	17.54	4.8
269 Peabody					12.30	13.88		15.82	17.88	
270 Pittsfield	2,434	58.03	63.34	2.4	12.43	13.56	5.1	17.48	19.08	7.2
271 Plymouth			72.91	1.6		16.11	3.5		21.63	4.6
272 Randolph	4,820	96.18	88.34	2.0	18.14	16.66	3.8	19.23	17.67	4.0
273 Rockland	3,694	38.34	31.19	1.0	15.34	12.48	4.2	19.71	16.04	5.3
274 Salem	6,294	89.22	120.89	1.4	16.04	21.74	2.5	22.30	30.22	3.5
275 Somerville*	5,699	90.67	88.44	1.6	18.18	17.73	3.2	27.52	26.84	4.3
276 Southbridge	2,614	42.09	79.56	1.6	8.79	16.62	3.4	14.90	28.17	5.7
277 Springfield		116.23	139.94		18.26	21.99		31.63	38.09	
278 Stoneham	4,557	86.62	75.62	1.9	16.57	14.47	3.6	25.73	22.47	5.6
279 Stoughton*	2,924	51.58	69.46	1.8	9.94	13.38	3.4	12.85	17.30	4.4
280 Taunton*										
281 Wakefield	3,751	127.19	124.07	3.4	13.63	13.30	3.6	17.79	17.35	4.7
282 Waltham	5,582	111.30	69.92	2.0	20.98	18.84	3.8	24.06	21.61	4.3
283 Warren	3,522	98.97	93.70	2.8	12.07	11.43	3.4	15.66	14.83	4.4
284 Watertown	7,329	110.87	98.76	1.5	20.60	18.35	2.8	27.71	24.63	3.8
285 Webster	1,970	47.29	123.08	2.4	5.81	15.13	3.0	7.04	18.33	3.6
286 West Springfield	4,488	94.35	69.15	2.1				19.02	13.94	4.2
287 Westborough					16.18			20.83		
288 Westfield	5,182	88.10	92.11	1.7	14.54	15.20	2.8	20.20	21.11	3.9
289 Weymouth	3,936	116.26	90.62	3.0	17.06	13.30	4.3	23.25	18.12	5.9
290 Winchester	6,752	159.10	140.50	2.4	20.40	18.01	3.0	28.08	24.79	4.2
291 Woburn	3,970	37.22	41.99	0.9	13.53	15.60	3.5	18.85	21.27	4.7
292 Worcester	5,647	94.97	110.29	1.7	16.31	18.94	2.9	21.60	25.69	3.8

* Statistics of 1886-87.

TABLE 27.—Comparative Statistics for 1887-88 of Property, Expenses for Tuition, and Receipts from Local Taxation of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Total Assessed Value of Property of City or Town Per Capita of Population 6-14.	Value of School Property Per Capita of—		Ratio of Value of School Property to Total Assessed Valuation of City or Town.	Cost of Supervision and Teaching Per Capita of—		Cost of Supervision and Teaching in Mills per Dollar of Assessed Valuation.	Amount Received from City or Town Taxes Per Capita of—		Amount Raised by City or Town Tax in Mills per Dollar of Total Assessed Valuation.
		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.	
1	2	3	4	5	6	7	8	9	10	11
MICHIGAN.				<i>Per cent.</i>			<i>Mills per dollar.</i>			<i>Mills per dollar.</i>
293 Adrian		\$80.93	\$110.18	.....	\$11.25	\$15.32		\$9.72	\$13.23	
294 Ann Arbor	\$3,394	101.26	107.87	3.0	15.30	16.29	4.5	12.09	12.88	3.6
295 Battle Creek		97.90	130.54	.....					
296 Bay City			68.92	1.9		12.31	3.5		13.93	5.3
297 Cadillac	1,237	44.14	54.35	3.5	11.43	14.07	9.1	16.78	20.66	13.4
298 Cheboygan	1,927	20.94	49.05	1.1	5.13	12.02	2.7			
299 Coldwater		90.44	82.46	.....					
300 Detroit	4,130	37.61	85.81	0.9	6.79	15.49	1.6	10.80	24.63	2.6
301 East Saginaw	2,071	44.11	62.23	2.1	10.38	14.64	5.0	13.91	19.62	6.7
302 Escanaba		58.14	111.72	.....	6.41	12.31				
303 Flint	4,624	166.92	122.50	3.6	(a)	(a)	(a)	(a)	(a)	(a)
304 Grand Haven*	1,555	56.83	63.67	3.7	8.18	9.16	5.3	11.52	12.91	7.4
305 Grand Rapids	2,747	85.53	100.58	3.1	13.87	16.31	5.0	21.23	24.97	7.7
306 Ionia*	2,718	82.23	70.93	3.0	15.50	13.37	5.7	19.16	16.53	7.1
307 Jackson		79.83	83.22	.....	14.53	15.14				
308 Kalamazoo	2,766	78.99	91.20	2.9	10.44	12.05	3.8	12.18	14.06	4.4
309 Ludington	1,793	107.55	.....	6.0	11.94		6.7	25.27		14.1
310 Marquette	2,311	47.96	66.03	2.1	9.77	13.45	4.2	14.87	20.47	6.4
311 Marshall	2,662	153.79	186.05	5.8	14.39	17.40	5.4	15.99	19.35	6.0
312 Menominee	2,023	40.44	61.63	2.0	9.53	14.53	4.7	11.82	18.01	5.8
313 Monroe		34.32	90.00	.....				2.10	5.50	
314 Negaunee	1,956	38.33	70.22	2.0	7.98	14.62	4.1	11.30	20.70	5.8
315 Niles	2,532	73.79	78.30	2.9	13.66	14.50	5.4	18.38	19.50	7.3
316 Pontiac*	3,497	150.13	134.93	4.3	15.73	14.14	4.5	14.37	12.91	4.1
317 Port Huron	2,080	49.34	.....	2.4	7.10		3.4			
318 Saginaw			78.90	.....		12.46			20.44	
319 West Bay City	1,090	41.27	43.13	3.8	8.80	9.20	8.1	9.32	9.75	8.6
320 Wyandotte		57.82	87.50	.....	8.81	13.33		8.95	13.54	
321 Ypsilanti		57.74	93.97	.....					
MINNESOTA.										
322 Anoka	2,184	70.74	75.56	3.2	12.78	13.65	5.9	14.71	15.71	6.7
323 Brainerd			101.90	4.9		13.43	6.4			
324 Crookston			177.18	0.7	22.63	20.26	0.8	35.55	31.82	1.3
325 Duluth	27,027	197.91	117.45	4.4		13.93	5.2		17.75	6.6
326 Faribault*			70.61	2.4		13.45	4.6		20.66	7.0
327 Mankato	4,162	60.72	125.71	1.5	10.52	21.78	2.5			
328 Minneapolis			70.83	3.7		15.47	8.1		17.77	9.3
329 Red Wing	2,100	52.51	87.72	2.5	9.05	15.12	4.3	10.43	17.42	5.0
330 St. Cloud			195.90	1.9		27.76	2.7			
331 St. Paul			147.26	3.6		17.34	4.2		27.26	6.6
332 Still Water			154.03	4.0		15.11	4.0		15.01	3.9
333 Winona*										
MISSISSIPPI.										
334 Jackson		22.16	25.00	.....	3.14	3.55				
335 Meridian	1,773	7.75	16.49	0.4	5.52	11.75	3.1	5.07	10.78	2.9
336 Natchez	943	11.79	31.93	1.3	4.47	12.10	4.7	3.17	8.59	3.4
337 Vicksburg	1,637	15.62	33.11	1.0	6.07	12.87	3.7	6.80	14.41	4.2
MISSOURI.										
338 Butler	1,126	46.82	61.84	4.2	7.20	9.51	6.4	7.36	9.73	6.5
339 Carrollton	1,714	68.55	67.80	4.0	11.73	11.60	6.8	12.69	12.55	7.4
340 Carthage	1,285	44.98	52.94	3.5	8.92	10.50	6.9	8.85	10.66	7.0
341 Chillicothe*		38.85	60.12	.....					
342 Clinton	1,184	53.72	63.12	4.5	7.87	9.24	6.6			

* Statistics of 1886-87.

a See foot-note a, p. 281.

TABLE 27.—Comparative Statistics for 1887-88 of Property, Expenses for Tuition, and Receipts from Local Taxation of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Total Assessed Value of Property of City or Town Per Capita of Population 6-14.	Value of School Property of—		Ratio of Value of School Property to Total Assessed Valuation of City or Town.	Cost of Supervision and Teaching Per Capita of—		Cost of Supervision and Teaching in Mills per Dollar of Assessed Valuation.	Amount Received from City or Town Taxes Per Capita of—		Amount Raised by City or Town Tax in Mills per Dollar of Total Assessed Valuation.
		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.	
1	2	3	4	5	6	7	8	9	10	11
MISSOURI—continued.				<i>Per cent.</i>			<i>Mills per dollar.</i>			<i>Mills per dollar.</i>
343 Columbia	\$1,137	\$21.30	\$37.13	1.9	\$5.87	\$10.22	5.2			
344 De Soto	788	38.42	48.67	4.9	4.36	5.52	5.5	\$6.31	\$3.00	8.0
345 Hannibal	1,116	28.48	45.43	2.6	7.24	11.56	6.5			
346 Independence	1,521	60.82	81.88	4.0	6.80	9.16	4.5	6.91	9.30	4.5
347 Jefferson City*	1,016	34.99	60.83	3.4	5.88	10.23	5.8	8.36	14.54	8.2
348 Kansas City		50.39	128.15		6.43	16.35		9.45	24.02	
349 Lexington	1,106	10.21	23.53	0.9						
350 Louisiana	1,181	23.03	37.44	2.4	5.97	7.98	5.1	0	0	0
351 Maryville	1,687	65.69	72.68	3.9	8.15	9.02	4.8	13.89	15.37	8.2
352 Mexico	1,410	30.71	36.75	2.2	8.78	10.50	6.2			
353 Moberly	511	21.52	42.08	4.2	4.69	9.16	9.2			
354 Nevada	948	50.12	57.49	5.3	8.42	9.66	8.9			
355 Pierce City		33.25			7.30					
356 Rich Hill	694	19.67	26.11	2.8	5.66	7.51	8.1			
357 St. Charles	1,574	20.15	53.62	1.3	4.17	11.11	2.7	1.64	4.35	1.0
358 St. Joseph	1,530	20.24	66.20	1.3	4.96	16.21	3.2	6.61	21.61	4.3
359 St. Louis			89.11	1.6		17.73	3.1		21.63	3.8
360 Sedalia	1,480	58.46	62.63	3.6	9.62	11.27	6.5			
361 Springfield	1,413	103.06	153.55	7.3	5.30	7.90	3.7	8.18	12.19	5.8
362 Washington	504	9.80	34.17	1.9	3.26	11.36	6.5	1.77	6.13	3.5
MONTANA.										
363 Butte City	5,266	58.98	78.35	1.1	18	24.43	3.5			
NEBRASKA.										
364 Beatrice	1,289	74.58	84.42	5.8	12.20	13.81	9.5			
365 Fremont*		54.45	56.12		12.46	12.85		9.90	10.20	
366 Grand Island	648	92.36	105.52	14.3	14.05	16.08	21.7			
367 Hastings	1,753	116.56	135.85	6.7	9.58	11.16	5.5	13.57	15.81	7.7
368 Kearney	992	100.96	105.18	10.2	12.00	12.50	12.1			
369 Lincoln	997	81.54	125.62	8.2	7.12	10.93	7.1	13.36	20.58	13.4
370 Omaha	2,302	137.32	175.64	6.0	17.61	22.52	7.7	4.76	6.08	20.7
371 Plattsmouth	546	49.59	63.15	9.1						
NEVADA.										
372 Carson City	1,780	28.16	30.37	1.6	13.11	14.14	7.4	0	0	0
373 Gold Hill	925	33.72		9.1						
374 Virginia City	1,046	23.80	25.21	2.3	14.86	15.75	14.2			
NEW HAMPSHIRE.										
375 Claremont	3,316	55.56	65.42	1.7	9.44	11.11	2.8	11.22	12.91	3.3
376 Concord						14.34			5.35	
377 Dover	5,014	87.58	127.36	1.7	11.83	17.23	2.4	16.70	24.29	3.3
378 Keene*						11.31			18.87	
379 Manchester			141.82	1.6		17.27	1.9		23.72	2.7
380 Nashua	5,250	122.85	178.90	2.3	13.08	19.04	2.5	18.41	26.81	3.5
381 Portsmouth	4,944	30.58	33.85	0.6	15.03	16.75	3.1	17.51	19.38	3.5
382 Rochester	2,563	47.56	57.81	1.9	11.94	13.78	4.4	2.32	2.82	0.9
383 Somersworth	2,026	59.59	86.96	2.9	8.49	12.39	4.2	14.90	21.74	7.4
NEW JERSEY.										
384 Atlantic City*	3,015	65.42	96.27	2.2				8.99	13.24	3.0
385 Bayonne	3,374	51.61	96.22	1.5	10.90	20.32	3.2	10.18	18.99	3.0
386 Camden	1,533	37.38	41.73	2.4	7.70	8.60	5.0			

* Statistics of 1886-87.

TABLE 27.—Comparative Statistics for 1887-88 of Property, Expenses for Tuition, and Receipts from Local Taxation of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Total Assessed Value of Property of City or Town Per Capita of Population 6-14.	Value of School Property Per Capita of—		Ratio of Value of School Property to Total Assessed Valuation of City or Town.	Cost of Supervision and Teaching Per Capita of—		Cost of Supervision and Teaching in Mills per Dollar of Assessed Valuation.	Amount Received from City or Town Taxes Per Capita of—		Amount Raised by City or Town Tax in Mills per Dollar of Total Assessed Valuation.
		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.	
1	2	3	4	5	6	7	8	9	10	11
NEW JERSEY—cont'd.							Mills per dollar.			Mills per dollar.
387 Elizabeth	\$2,373	\$19.99	\$42.33	0.8	\$8.69	\$18.41	3.7	\$3.00	\$6.35	1.3
388 Gloucester*										
389 Harrison	1,382	11.06	46.24	0.8	6.22	26.01	4.5	1.45	6.07	1.1
390 Jersey City	1,890	18.33	45.06	1.0	5.56	13.06	2.9			
391 Lambertville	2,669	32.62		1.2	8.91		2.7	1.78		0.7
392 Long Branch*		78.56	122.63		8.92	13.92		8.96	13.99	
393 Millville	1,749	35.45	41.75	2.0	10.03	11.81	5.7	10.10	11.89	5.8
394 Montclair	3,442	67.13	88.19	2.0	18.66	23.73	5.2	18.58	24.41	5.4
395 Morristown	4,184	58.57	95.11	1.4	9.93	16.13	2.4	9.62	15.63	2.3
396 Mount Holly	2,505	17.80	31.76	0.7	8.77	15.64	3.5	4.41	7.87	1.8
397 New Brunswick		39.69	77.14		6.75	13.12				1.2
398 Newark	3,012	37.64	77.11	1.3	8.08	16.56	2.7	3.55	7.27	
399 Orange	1,772	33.48	85.93	1.9	7.01	18.00	4.0	2.55	6.55	1.4
400 Passaic	2,060	49.08	78.69	2.4	8.60	13.80	4.2	9.92	15.90	4.8
401 Paterson		30.09	48.55		7.95	12.85				
402 Phillipsburg	1,726	21.67	26.89	1.3	8.51	10.57	4.9	4.37	5.42	2.5
403 Plainfield	3,200	80.63	105.07	2.5	12.69	16.54	4.0	11.97	15.59	3.7
404 Rahway	2,284				10.32	14.08	4.5	7.63	10.40	3.3
405 Salem	3,728	34.41		0.9	10.77		2.9	6.34		1.7
406 Trenton	2,613	30.74	58.21	1.2	7.70	14.58	2.9	2.59	4.91	1.0
407 Weehawken	1,244	40.43	55.37	3.3	7.42	10.17	6.0	4.98	6.81	4.0
NEW YORK.										
408 Albany			90.21	1.3		16.65	2.4		15.67	2.3
409 Albion	3,224	55.51	77.85	1.7	14.08	19.74	4.4	11.03	15.46	3.4
410 Auburn	3,177	75.58	97.50	2.4	11.66	15.04	3.7	17.76	22.91	5.6
411 Batavia	2,862	104.92	142.79	3.7	8.90	12.11	3.1			
412 Binghamton	4,435	74.78	80.71	1.7	11.88	12.82	2.7	13.96	15.07	3.1
413 Brooklyn			52.13			16.57				
414 Buffalo	3,029	35.07	70.75	1.2	10.28	20.72	3.4	11.79	23.79	3.9
415 Canandaigua	4,918	86.26	115.20	1.8	9.68	12.92	2.0	10.72	14.32	2.2
416 Catskill			64.42	1.3		9.55	1.9		9.62	1.9
417 Cohoes	2,765	27.65	52.23	1.0	6.48	12.23	2.3	7.92	14.95	2.9
418 Corning*	2,057	110.10	119.30	5.4	11.73	12.71	5.7	16.13	17.88	7.8
419 Cortland	1,358	18.96	41.08	1.4	5.22	11.31	3.8			
420 Dansville	1,961	58.05	108.82	3.0	8.63	16.18	4.4	11.77	22.06	6.0
421 Dunkirk	1,290	79.24	128.60	6.1	11.32	18.37	8.8	12.49	20.27	9.7
422 Ellenville	556	42.27	49.52	7.6	11.04	12.93	19.9	10.23	12.11	18.6
423 Elmira	3,601	108.10	116.16	3.0	12.80	13.75	3.6	18.56	19.94	5.2
424 Flushing*	1,138	41.33	104.75	3.6	7.42	18.80	6.5	9.15	23.18	8.0
425 Geneva	4,768	54.69	46.28	1.2	10.62	8.99	2.2	8.18	6.92	1.7
426 Gloversville					9.85	10.49				
427 Green Island	2,728	54.62	62.94	2.0	10.97	12.64	4.0	11.04	12.72	4.0
428 Herkimer	4,920	47.00	53.50	1.0	12.85	14.63	2.6	11.07	12.60	2.3
429 Hoosick Falls	3,139	79.05	64.13	2.5	15.64	12.70	5.0	21.58	17.52	6.9
430 Hornellsville	2,872	47.38	49.33	1.7	11.27	11.86	3.9	12.34	12.93	4.3
431 Hudson			60.66	0.9		13.01	2.0		8.12	1.2
432 Ilion	1,977	52.72	39.79	2.7	16.59	12.52	8.4	17.13	12.93	8.7
433 Ithaca	1,980	99.71	107.98	5.0	12.91	13.98	6.5	14.60	15.84	7.4
434 Jamaica					7.27			8.47		
435 Jamestown	1,622	72.11	81.27	4.5	13.74	15.48	8.5	9.98	11.24	6.7
436 Johnstown	2,113	61.57	73.43	2.9	9.35	11.16	4.4	11.45	13.65	5.4
437 Kingston	3,985	113.25	153.57	2.8	13.73	18.62	3.4	16.26	22.57	4.1
438 Lansingburg	3,475	31.02	46.25	0.9	9.23	13.76	2.7	9.69	14.45	2.8
439 Little Falls	1,029				10.01	11.05	9.7	14.10	15.58	13.7
440 Lockport			33.09	1.0		13.48	4.3		14.54	4.6
441 Long Island City	2,008	19.11	26.57	1.0	7.76	10.79	3.9	9.77	13.58	4.9
442 Lyons	2,645	33.61	31.05	1.3	13.04	12.05	4.9	15.50	14.32	5.8

* Statistics of 1886-87.

TABLE 27.—Comparative Statistics for 1887-88 of Property, Expenses for Tuition, and Receipts from Local Taxation of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Total Assessed Value of Property of City or Town Per Capita of Population 6-14.	Value of School Property Per Capita of—		Ratio of Value of School Property to Total Assessed Valuation of City or Town.	Cost of Supervision and Teaching Per Capita of—		Cost of Supervision and Teaching in Mills per Dollar of Assessed Valuation.	Amount Received from City or Town Taxes Per Capita of—		Amount Raised by City or Town Tax in Mills per Dollar of Total Assessed Valuation.
		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.	
1	2	3	4	5	6	7	8	9	10	11
NEW YORK—continued.										
				Per cent.			Mills per dollar.			Mills per dollar.
443 Malone.....	\$2,260	\$73.89	\$73.32	3.3	\$11.79	\$11.71	5.2	\$14.24	\$14.13	6.3
444 Medina.....	3,377	55.89	59.06	1.7	12.56	13.28	3.7	10.47	11.06	3.1
445 Middletown*.....	2,260	56.19	60.69	2.5	11.14	12.03	4.9	13.98	15.10	6.2
446 Mount Vernon.....	1,658	89.08	98.20	5.4	17.16	18.92	10.3	24.06	26.52	14.5
447 New Rochelle.....	1,719	61.02	111.11	3.6	10.94	19.92	6.4	15.14	27.57	8.8
448 New York.....	6,105	65.43	89.51	1.1	14.24	19.49	2.3	17.02	23.29	2.8
449 Newburg.....	2,778	80.49	115.63	2.9	11.13	15.99	4.0	13.29	19.09	4.8
450 Ogdensburg*.....	1,999	45.22	68.81	2.3				7.99	12.16	4.0
451 Olean.....	1,667	73.89	85.57	4.4	10.79	12.49	6.5	15.24	17.63	9.1
452 Oswego.....	2,417	48.18	69.05	2.0	8.83	12.66	3.7	9.02	12.93	3.7
453 Owego.....						16.85			18.97	
454 Penn Yan.....			86.32	3.2		16.52	6.1			
455 Plattsburg*.....	1,163	55.33	69.00	4.7	9.84	12.28	8.4	11.44	14.27	9.8
456 Port Chester.....	1,419	57.45	103.15	4.0	11.33	20.34	8.0	14.44	25.93	10.2
457 Port Jervis.....	965	45.48	50.93	4.7	10.27	11.50	10.6	9.65	10.80	10.0
458 Poughkeepsie.....	3,854	51.28	74.13	1.3	10.29	14.87	2.7	10.38	15.00	2.7
459 Rochester.....			60.31	0.9		15.17	2.3		21.37	3.3
460 Rome.....		52.99	63.02		11.54	13.75		10.19	12.14	
461 Saratoga Springs.....	2,968	78.71	74.63	2.7	16.95	16.06	5.7	20.06	19.02	6.8
462 Seneca Falls.....		40.45	58.57		9.39	11.84				
463 Sing Sing.....	2,006	34.38	41.33	1.7	14.20	17.07	7.1	15.77	18.96	7.9
464 Syracuse.....	2,620	76.17	102.87	2.9	11.00	14.85	4.2	14.29	19.30	5.5
465 Tarrytown.....	7,076	45.79	64.39	0.7	14.27	20.08	2.0			
466 Tonawanda.....	1,056	24.15	43.17	2.3	4.95	8.65	4.7	3.17	5.54	3.0
467 Troy*.....			89.54	1.1		19.24	2.4		15.56	1.9
468 Utica.....	2,524	52.92	80.77	2.1	9.72	14.83	3.8	9.33	14.25	3.8
469 Waterford.....	1,343	25.68	36.42	1.9	10.94	14.65	7.7	9.12	12.93	6.8
470 Waterloo.....	3,367	68.83	78.15	2.0	12.16	13.80	3.6	13.32	15.13	4.0
471 Watertown.....	2,539	63.74	86.29	2.5	11.52	15.60	4.5	13.04	17.65	5.1
472 West New Brighton*.....	1,255	37.03	57.06	3.0	12.33	19.01	9.8	14.63	22.55	11.7
473 White Plains.....			118.77	3.5		17.20	5.1			
474 Yonkers.....	4,399	44.44	100.21	1.0	9.78	22.05	2.2	13.67	30.82	3.1
NORTH CAROLINA.										
475 Durham.....		5.90	19.91	2.1	3.43	11.58	1.2			
476 Fayetteville.....	2,782	16.65	27.27							
477 New Berne*.....		15.67	27.09		4.37	7.80		3.84	6.83	
478 Raleigh.....		4.20	8.60	0.3	4.14	8.46	2.5	2.04	4.18	1.3
479 Reidsville.....	1,629									
480 Winston.....		35.41	52.34							
OHIO.										
481 Akron.....	2,312	120.24	137.21	5.2	11.15	12.73	4.8	21.05	24.02	9.1
482 Alliance.....	1,696	127.80	133.06	7.5	9.59	9.98	5.7	18.26	15.02	10.8
483 Ashtabula.....			84.72							
484 Bellaire.....	1,545				6.43	9.33	4.2			
485 Bellefontaine.....		87.09	102.79		14.58	17.20		15.58	18.39	
486 Bucyrus.....	2,861	111.41	132.98	3.9	9.05	10.80	3.2	15.94	19.03	5.6
487 Canton*.....	2,203	73.44	93.04	3.3	8.57	10.86	3.9	15.28	19.37	6.9
488 Chillicothe.....	2,590	68.60	97.97	2.7	12.04	17.20	4.6	12.79	18.27	4.9
489 Cincinnati.....	3,830	50.25	81.76	1.3	13.24	21.53	3.5	17.37	28.26	4.5
490 Circleville*.....	2,961	103.49	151.47	3.7	13.40	39.09	4.5	14.51	20.68	4.9
491 Cleveland.....	2,574				11.84	17.32	4.6	12.86	18.81	4.9
492 Columbus.....	2,932	77.69	116.13	2.7	11.06	16.54	3.8	15.79	23.60	5.4

* Statistics of 1896-97.

TABLE 27.—Comparative Statistics for 1887-88 of Property, Expenses for Tuition, and Receipts from Local Taxation of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Total Assessed Value of Property of City or Town Per Capita of Population 6-14.	Value of School Property Per Capita of—		Ratio of Value of School Property to Total Assessed Valuation of City or Town.	Cost of Supervision and Teaching Per Capita of—		Cost of Supervision and Teaching in Mills per Dollar of Assessed Valuation.	Amount Received from City or Town Taxes Per Capita of—		Amount Raised by City or Town Tax in Mills per Dollar of Total Assessed Valuation.
		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.	
1	2	3	4	5	6	7	8	9	10	11
OHIO—continued.				Per cent.			Mills per dollar.			Mills per dollar.
493 Dayton.....		\$55.52	\$75.22		\$14.83	\$20.09				
491 DeFiance*.....	\$2,040	60.36	95.94	3.4	7.83	10.84	3.8	\$5.93	\$3.20	2.9
495 Delphos.....	1,229	40.79	53.21	3.3	8.15	10.63	6.6	8.60	11.22	7.0
496 East Liverpool*.....		39.09	56.82		6.42	10.10		4.08	6.42	
497 Elyria.....			109.42	3.8		14.91	5.1			
498 Findlay.....	1,438	72.06	88.83	5.1						
499 Fostoria.....	2,035	75.02	83.12	3.7	9.29	10.39	4.0	0.40		0.2
500 Fremont.....	1,976	54.50	73.03	2.8	10.27	13.77	5.2	16.01	21.47	8.1
501 Gallon.....	1,070	103.42	108.39	5.3	10.23	10.70	5.2	11.42	11.91	5.8
502 Gallipolis.....	2,267	39.82	48.68	1.8	10.45	12.77	4.6	12.29	15.02	5.4
503 Hamilton*.....	2,384	55.03	79.92	2.3	11.13	16.16	4.7			
504 Ironton.....	1,663	49.29	59.52	3.0	9.86	11.91	5.9	10.19	12.39	6.1
505 Lancaster.....	2,513	78.26	98.47	3.1	12.55	15.79	5.0	16.27	20.43	6.5
506 Lima*.....	1,837	48.39	64.09	2.6	7.94	10.51	4.3	9.74	12.91	5.2
507 Mansfield*.....		112.15	115.49		13.14	13.53		23.53	24.23	
508 Marietta.....	2,289	39.53	44.46	1.7	11.52	12.96	5.0	4.38	4.93	1.9
509 Martin's Ferry.....		41.71	48.19		9.14	10.57		0.30	0.35	
510 Massillon*.....	1,702	67.55	96.39	4.0	8.13	11.60	4.8	11.69	16.68	6.7
511 Middletown*.....	2,601	84.92	156.44	3.3	8.55	15.75	3.3	10.73	19.75	4.1
512 Mount Vernon.....	2,629	87.27	95.08	3.3						
513 Nelsonville.....	909	75.65	82.87	8.3	7.93	8.69	8.7			
514 Newark.....										
515 Norwalk.....	2,231	82.30	106.22	3.7	11.44	14.76	5.1	14.84	19.16	6.7
516 Painesville.....	3,380	71.02	100.80	2.1	14.73	20.91	4.3	18.23	25.87	5.4
517 Piqua.....	2,085	57.17	95.94	2.7	8.40	14.10	4.0	11.98	20.11	5.7
518 Portsmouth.....		74.12	121.70		8.01	13.15		8.78	14.42	
519 Ravenna.....								13.92	21.85	
520 Salem*.....				1.0			2.1			2.9
521 Sandusky.....	1,740	44.50	63.76	2.6	8.23	12.17	4.7	12.01	17.75	6.9
522 Sidney.....										
523 Springfield.....	3,109	53.43	70.29	1.7	11.92	15.69	3.8	14.97	19.69	4.8
524 Steubenville.....	2,020	59.90	86.93	3.0	10.20	14.80	5.0	14.08	20.44	7.0
525 Tiffin.....	1,093	77.44	122.55	4.0	8.57	13.57	4.3	12.44	19.69	6.2
526 Toledo.....	2,367	56.59	102.56	2.4	7.19	13.03	3.0	12.29	22.28	5.2
527 Urbana.....	3,369	90.28	122.01	2.7	12.47	16.85	3.7	20.33	27.47	6.0
528 Van Wert.....	1,593	70.24	76.27	4.4	10.46	11.36	6.6	15.16	16.47	9.6
529 Washington C. H.....	2,593	117.90	100.33	4.6	14.10	12.00	5.5	20.12	17.12	7.8
530 Wooster*.....		111.21	120.91		12.43	13.52		13.32	14.45	
531 Xenia.....	3,018	67.57	86.94	2.2						
532 Youngstown.....			124.03	5.6		12.85	5.8		14.98	6.7
533 Zanesville*.....					11.26	16.06				
OREGON.										
534 Astoria.....			129.95	1.9		13.74	2.1		22.40	3.4
535 Portland.....	3,882	105.76	128.94	2.7	19.41	23.67	5.0	12.76	15.55	3.3
536 Salem.....	1,611	50.20	85.49	3.1	6.83	11.64	4.2	8.27	14.08	5.1
PENNSYLVANIA.										
537 Allegheny.....			113.93	2.4		13.77	2.9		22.20	4.8
538 Allentown.....			164.17	5.7		10.74	3.0		17.66	6.1
539 Altoona.....			77.49	2.2		8.06	2.3		14.99	4.2
540 Ashland.....	1,066	68.04	42.22	3.1		8.91	6.5		14.89	10.9
541 Beaver Falls.....	1,066	68.04	60.71	6.4	9.45	8.43	8.9	14.07	12.55	13.19
542 Bellefonte.....	1,770	94.05	91.22	5.3	10.35	10.04	5.8	16.95	16.45	9.6
543 Bethlehem.....			127.10	3.3		9.53	2.3		18.53	4.8
544 Bradlock.....	2,850	89.25	60.95	3.1	12.64	8.63	4.4			
545 Bradford.....			41.27	5.5		10.79	14.4		16.83	22.4

* Statistics of 1886-87.

TABLE 27.—Comparative Statistics for 1887-88 of Property, Expenses for Tuition, and Receipts from Local Taxation of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

	City or Town.	Total Assessed Value of Prop-erty of City or Town Per Cap-ita of Population 6-14.	Value of School Prop-erty Per Cap-ita of—		Ratio of Value of School Prop-erty to Total Assessed Val-uation of City or Town.	Cost of Supervision and Teaching Per Capita of—		Cost of Supervision and Teach-ing in Mills per Dollar of As-sessed Valuation.	Amount Received from City or Town Tax Per Capita of—		Amount Raised by City or Town Tax in Mills per Dollar of Total Assessed Valuation.
			Population 6-14.	Average Attend-ance.		Population 6-14.	Average Attend-ance.		Population 6-14.	Average Attend-ance.	
	1	2	3	4	5	6	7	8	9	10	11
	PENNSYLVANIA—con- tinued.				Per cent.			Mills per dollar.			Mills per dollar.
546	Bristol	\$3, 019	\$55.13	.....	1.8	\$9.24	.....	3.1	\$14.19	.....	4.7
547	Butler .....	.....	.....	\$56.57	7.0	.....	\$7.63	9.5	.....	\$10.41	12.9
548	Carbondale .....	.....	.....	.....	3.9	.....	.....	13.1	.....	.....	15.7
549	Carlisle .....	.....	.....	.....	.....	.....	10.40	4.4	.....	15.28	6.6
550	Chambersburg .....	.....	.....	46.41	2.4	.....	10.90	5.6	.....	12.64	6.5
551	Chester .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
552	Columbia .....	.....	.....	32.70	1.7	.....	8.79	4.5	.....	11.23	5.8
553	Conshohocken *	.....	.....	85.56	1.7	.....	10.85	2.2	.....	20.19	4.0
554	Corry .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
555	Danville *	.....	.....	60.64	.....	.....	9.72	.....	.....	12.56	.....
556	Du Bois .....	.....	.....	44.37	6.5	.....	6.79	10.0	.....	.....	.....
557	Dunmore .....	.....	.....	43.64	7.2	.....	13.04	21.4	.....	15.88	26.1
558	Easton *	.....	.....	127.70	2.9	.....	14.60	3.4	.....	22.03	5.1
559	Erie	2, 537	55.93	94.74	2.2	8.66	14.66	3.4	10.39	17.61	4.1
560	Greenville .....	.....	.....	43.38	3.3	.....	9.87	7.5	.....	11.17	8.5
561	Harrisburg .....	.....	.....	83.10	6.0	.....	13.39	9.6	.....	17.91	12.9
562	Hazleton	565	38.98	49.32	6.9	8.58	10.86	15.2	11.80	14.93	20.9
563	Honesdale	1, 500	81.77	63.72	5.5	16.74	13.05	11.2	20.38	15.88	13.6
564	Johnstown .....	.....	.....	84.15	.....	.....	10.88	.....	.....	11.92	.....
565	Lancaster .....	.....	.....	70.16	1.7	.....	11.60	2.8	.....	12.87	3.1
566	Lebanon	1, 421	67.13	51.16	4.7	9.31	7.10	6.6	15.40	11.73	10.8
567	Lewistown .....	.....	.....	.....	.....	.....	9.35	8.2	.....	.....	.....
568	Lock Haven .....	.....	.....	102.54	5.7	.....	8.46	4.7	.....	19.03	10.6
569	McKeesport .....	.....	.....	74.19	2.4	.....	11.07	3.5	.....	15.96	5.1
570	Mahanoy .....	.....	.....	45.71	3.7	.....	9.24	7.4	.....	13.52	10.9
571	Meadville .....	.....	.....	61.73	4.5	.....	14.03	10.2	.....	20.24	14.7
572	Milton	1, 107	70.41	64.77	6.4	12.93	11.89	11.7	16.59	15.26	15.0
573	Monongahela .....	.....	.....	80.53	5.5	.....	10.34	7.1	.....	16.35	11.3
574	Nanticoke	800	51.05	62.17	6.4	9.10	11.08	11.4	15.22	18.53	19.0
575	New Brighton .....	.....	.....	38.66	.....	.....	8.52	.....	.....	13.83	.....
576	New Castle .....	.....	.....	83.66	4.1	.....	9.81	4.8	.....	13.59	6.7
577	Norristown .....	.....	.....	89.30	2.2	.....	14.25	3.4	.....	21.56	5.2
578	Oil City *	.....	.....	57.46	5.0	.....	12.28	10.8	.....	20.51	18.0
579	Olyphant .....	.....	.....	.....	.....	.....	10.57	8.6	.....	13.96	11.4
580	Philadelphia .....	.....	.....	82.05	1.2	.....	15.00	2.2	.....	21.57	3.2
581	Phoenixville	2, 965	49.36	47.76	1.7	10.81	10.22	3.6	15.48	14.98	5.2
582	Pittsburg .....	.....	.....	91.94	1.3	.....	15.80	2.3	.....	27.11	3.9
583	Pittston .....	.....	.....	31.24	3.9	.....	10.03	12.6	.....	13.80	17.4
584	Plymouth .....	.....	.....	47.63	6.7	.....	7.98	11.3	.....	12.02	17.0
585	Pottstown .....	.....	.....	94.54	3.4	.....	9.27	3.4	.....	15.83	5.7
586	Reading .....	.....	.....	54.13	1.4	.....	8.78	2.3	.....	14.52	3.8
587	Scranton .....	.....	.....	51.97	3.2	.....	13.02	8.1	.....	24.14	14.9
588	Sharpsburg .....	.....	.....	25.56	0.5	.....	12.07	2.5	.....	13.97	2.9
589	Shenandoah .....	.....	.....	43.75	4.6	.....	8.91	9.3	.....	14.88	15.5
590	South Bethlehem	3, 725	65.90	69.16	1.8	10.33	10.83	2.8	12.23	12.81	3.3
591	South Easton .....	.....	.....	36.45	1.6	.....	10.50	4.7	.....	16.20	7.3
592	Susquehanna .....	.....	.....	68.49	15.6	.....	8.72	19.9	.....	.....	.....
593	Tamaqua .....	.....	.....	56.54	4.0	.....	7.71	5.5	.....	9.13	6.5
594	Titusville .....	.....	.....	53.11	.....	.....	13.48	.....	.....	22.03	.....
595	Tyrene	738	55.96	52.52	7.6	9.45	8.87	12.8	9.88	9.29	13.4
596	Warren .....	.....	.....	90.70	3.4	.....	15.44	5.7	.....	18.12	6.7
597	Washington .....	.....	.....	53.48	.....	.....	11.02	.....	.....	17.87	.....
598	West Chester .....	.....	.....	132.80	1.6	.....	16.01	2.0	.....	27.82	3.4
599	Wilkes Barre .....	.....	.....	59.90	6.4	.....	10.99	11.7	.....	17.28	18.4
600	Williamsport	1, 802	58.62	76.66	3.3	9.69	12.67	5.4	.....	.....	.....
601	York .....	.....	.....	61.98	1.7	.....	11.71	3.2	.....	20.55	5.5

* Statistics of 1886-87.

TABLE 27.—Comparative Statistics for 1887-88 of Property, Expenses for Tuition, and Receipts from Local Taxation of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Total Assessed Value of Property of City or Town Per Capita of Population 6-14.	Value of School Property Per Capita of—		Ratio of Value of School Property to Total Assessed Valuation of City or Town.	Cost of Supervision and Teaching Per Capita of—		Cost of Supervision and Teaching in Mills per Dollar of Assessed Valuation.	Amount Received from City or Town Taxes Per Capita of—		Amount Raised by City or Town Tax in Mills per Dollar of Assessed Valuation.
		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.	
1	2	3	4	5	6	7	8	9	10	11
RHODE ISLAND.				Per cent.			Mills per dollar.			Mills per dollar.
602 Bristol			\$77.20	1.2		\$11.90	1.8		\$10.54	1.6
603 Burrillville		\$26.34	38.48							
604 Central Falls		37.40	61.35		\$5.78	9.42		\$3.76	6.17	
605 Cranston	\$7,401	36.58		0.5	7.61		1.0	5.37		0.7
606 Cumberland	5,555	38.71	66.86	0.7	10.09	17.42	1.8	7.22	12.46	1.3
607 East Providence	5,048	61.50	73.76	1.2	11.45	13.73	2.3	11.63	14.01	2.3
608 Johnston	3,012	26.70	42.79	0.7	8.49	13.60	2.2	4.58	7.84	1.2
609 Newport	9,902	54.25	87.10	0.6	13.79	22.14	1.4	16.02	25.72	1.6
610 Pawtucket	5,500	83.52	122.12	1.5	11.12	16.26	2.0	25.28	36.06	4.5
611 Providence	7,286				12.21	17.49	1.7	12.00	17.19	1.6
612 South Kingstown <i>a</i>	6,130	34.82	52.55	0.6	10.73	16.20	1.7	4.12	6.23	0.7
613 Westerly	4,660	78.81	83.45	1.7	13.25	14.04	2.8	15.20	16.10	3.3
614 Woonsocket	2,267	46.15	111.42	2.0	6.28	15.15	2.8	7.70	18.59	3.4
SOUTH CAROLINA.										
615 Charleston	3,293	18.49	25.16	0.6	9.79	13.32	3.0	4.11	5.59	1.2
616 Columbia			30.29	0.9		9.45	2.7			
617 Greenville			42.96	1.3		6.97	2.1		3.07	0.9
TENNESSEE.										
618 Chattanooga	3,189	38.05	54.71	1.2	7.33	10.54	2.3	12.89	18.53	4.0
619 Clarksville	2,075	13.82	22.25	0.7	5.80	9.34	2.8	3.55	5.72	1.7
620 Jackson*		5.86	10.50		4.18	7.49		2.61	5.05	
621 Knoxville	1,595	27.00	40.10	1.7	8.20	12.18	5.1	4.06	6.03	2.5
622 Memphis	2,783	18.51	41.72	0.7	5.58	12.57	2.0	4.86	10.96	1.7
623 Union City	1,335	22.29	25.04	1.7				2.40	2.70	1.8
TEXAS.										
624 Austin	3,959	34.76	34.29	0.9	15.10	14.90	3.8	13.25	13.07	3.3
625 Brenham	1,434	16.91	36.89	1.2	8.32	18.16	5.8	4.91	10.72	3.4
626 Brownsville	915	16.84	49.62	1.8	4.87	14.36	5.3	1.15	3.33	1.3
627 Denison	1,328	44.05	83.24	3.3	7.63	14.51	5.8	10.74	20.30	8.1
628 El Paso	7,994	44.31	76.63	0.6	15.41	26.65	1.9	28.40	49.13	3.6
629 Fort Worth	2,432	18.80	32.11	0.8	10.10	17.25	4.2	6.11	10.43	3.5
630 Galveston	1,799	26.43	81.03	1.5	4.67	14.31	2.6	3.56	10.92	2.0
631 Houston	1,743	13.80	40.01	0.8	4.93	14.61	2.8	3.75	11.11	2.2
632 Palestine	1,770	16.75	41.54	1.0	7.06	18.99	4.3	3.84	9.52	2.2
633 Paris	1,473	15.55	42.87	1.1				3.05	8.41	2.1
634 Sherman	1,824	41.35	75.89	2.3	7.25	13.22	4.0			
635 Waco	1,803	29.95	63.18	1.7	7.07	14.92	3.9	7.33	15.46	4.1
UTAH.										
636 Ogden	2,562	47.80	95.46	1.9	5.78	11.55	2.3	4.91	9.81	1.9
637 Provo City		42.82	125.36		5.28	15.45		6.97	20.41	
VERMONT.										
638 Bennington			121.05	15.7		12.36	14.8		19.87	23.8
639 Brattleborough										3.3
640 Rockingham					16.71	16.69		22.34	22.30	
641 Rutland										
642 St. Johnsbury			76.63	1.5		12.21	2.3		19.80	3.8

a Statistics of 1886-87. See foot-note *a*, p. 357.

TABLE 27.—Comparative Statistics for 1887-88 of Property, Expenses for Tuition, and Receipts from Local Taxation of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.

City or Town.	Total Assessed Value of Property of City or Town Per Capita of Population 6-14.	Value of School Property Per Capita of—		Ratio of Value of School Property to Total Assessed Valuation of City or Town.	Cost of Supervision and Teaching Per Capita of—		Cost of Supervision and Teaching in Mills per Dollar of Assessed Valuation.	Amount Received from City or Town Taxes Per Capita of—		Amount Raised by City or Town Tax in Mills per Dollar of Total Assessed Valuation.
		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.	
1	2	3	4	5	6	7	8	9	10	11
VIRGINIA.										
643 Alexandria	\$1,669	\$9.68	\$22.03	Per cent.	\$4.23	\$9.74	Mills per dollar.	\$3.34	\$7.59	2.0
644 Fredericksburg	1,715	12.72	15.75	0.6	4.61	5.70	2.6	2.83	3.50	1.6
645 Lynchburg	2,858	21.58	31.76	0.8	7.27	10.71	2.5	7.57	11.15	2.7
646 Norfolk	3,467	17.35	44.81	0.5	4.66	12.04	1.3	3.14	8.13	0.9
647 Petersburg	2,330	17.80	31.76	0.8	4.98	8.88	2.1	4.57	8.15	2.0
648 Richmond	3,566	38.10	50.92	1.1	8.18	10.94	2.3	8.62	11.52	2.4
649 Staunton	2,245	27.24	39.18	1.2	7.07	10.17	3.2	6.06	8.72	2.7
650 Winchester	2,463	16.34	28.22	0.7	4.90	8.46	2.0	3.06	5.29	1.2
WASHINGTON.										
651 Tacoma	168.32	160.06	18.38	17.48	16.65	15.88				
652 Walla Walla	3,825	58.89	64.34	1.5	13.15	14.37	3.4			
WEST VIRGINIA.										
653 Charleston*				1.0			4.5			5.0
654 Grafton	1,429	23.37	28.15	1.6	5.21	6.28	3.6	5.23	6.30	3.7
655 Martinsburg	1,384	33.07	33.31	2.4	6.29	6.34	4.5	5.53	5.57	4.0
656 Parkersburg										
657 Wheeling	2,751	41.12	68.69	1.5	8.25	13.78	3.0	11.52	19.24	4.2
WISCONSIN.										
658 Appleton	1,949	79.46	80.11	4.1	12.05	12.15	6.2	16.03	16.17	8.2
659 Baraboo		64.93	55.56		14.41	12.32		22.35	19.12	
660 Beloit	2,553	132.66	137.23	5.2	13.23	13.63	5.2	13.14	13.59	5.1
661 Berlin	1,385	7.01	7.10	0.5	10.63	10.76	7.7	11.60	11.84	8.4
662 Chippewa Falls	4,822	45.57	82.12	1.0	8.20	14.79	1.7	11.07	19.94	2.3
663 Fond du Lac	1,258	49.54	80.46	3.9	6.71	10.89	5.3	5.11	8.30	4.1
664 Fort Howard	1,209	27.35	26.06	2.3	9.35	8.91	7.7	6.69	6.38	5.5
665 Green Bay	1,090	50.09	83.56	4.6	8.36	13.94	7.7	6.89	11.50	6.3
666 Janesville*	2,888	107.83	195.63	3.7	6.75	12.25	2.3	6.02	10.92	2.1
667 Kenosha*	1,338	25.75	50.99	1.9	7.05	13.96	5.3	4.46	8.83	3.3
668 La Crosse	2,665	56.43	76.09	2.1	11.23	15.14	4.2	9.10	12.27	3.4
669 Madison	2,923	94.82	139.20	3.2	9.39	13.79	3.2	9.02	13.24	3.1
670 Menomonie	2,292	39.41	38.29	1.7	12.78	12.41	5.6	18.93	18.40	8.3
671 Merrill	2,536	23.70	29.82	0.9	7.97	9.99	3.1	9.60	12.04	3.8
672 Milwaukee	2,719	35.34	62.48	1.3	9.24	16.33	3.4	9.22	16.31	3.4
673 Monroe	3,694	58.47		1.6	12.34		3.3	5.68		1.5
674 Neenah	1,700	55.45		3.3	8.26		4.9	9.93		5.8
675 Oconto	1,265				2.25	2.54	1.8	2.02	2.29	1.6
676 Oshkosh					7.96			12.19		
677 Portage	1,576	49.04	72.04	3.1	9.22	13.54	5.8	4.57	6.68	2.9
678 Racine	2,363	34.65	55.78	1.5	8.18	13.17	3.5	5.90	9.50	2.5
679 Sheboygan	935	26.56	57.44	2.8	5.17	11.19	5.5	6.96	15.06	7.4
680 Stevens Point*		18.84	19.80							
681 Watertown		23.35	60.39	3.3	6.25	12.85	7.1	1.77	3.64	2.0
682 Waukesha	4,662	103.30	108.06	2.3	11.79	11.76	2.5	18.29	18.25	3.9
683 Wausau	1,424	36.89	63.83	2.6	6.56	11.56	4.6	4.86	8.41	3.4
WYOMING.										
684 Cheyenne		168.74			28.59					

* Statistics of 1886-87.

TABLE 23.—Summary by States, Geographical Divisions, and Classes According to Population of Comparative Statistics of Property, Expenses for Tuition, and Receipts from Local Taxation of Public School Systems of Cities and Towns containing over 4,000 Inhabitants.

State or Territory.	Total Assessed Value of Property of Cities and Towns Per Capita of Population 6-14.	Value of School Property per Capita of—		Ratio of Value of School Property to Total Assessed Valuation of Cities and Towns.	Cost of Supervision and Teaching Per Capita of—		Cost of Supervision and Teaching in Mills per Dollar of Assessed Valuation.	Amount Received from City and Town Taxes Per Capita of—		Amount Raised by City and Town Tax in Mills per Dollar of Total Assessed Valuation.
		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.	
1	2	3	4	5	6	7	8	9	10	11
				<i>Per cent.</i>			<i>Mills per dollar.</i>			<i>Mills per dollar.</i>
1 Alabama		\$21.77	\$43.54		\$6.64	\$14.13		\$5.85	\$11.98	
2 Arizona										
3 Arkansas	\$1,310	36.17	62.36	3.1	7.31	12.82				
4 California		59.38	102.03	1.3	14.66	25.02	3.2	6.06	10.22	1.4
5 Colorado		134.19	160.02		18.74	22.34				
6 Connecticut	3,223	71.42	84.66		13.65	17.31		12.28	15.51	3.6
7 Dakota										
8 Delaware			67.60	1.3		12.78	2.5		20.12	3.8
9 District of Columbia	3,491				12.22	16.79	3.5	10.98	15.09	3.1
10 Florida										
11 Georgia		19.70	38.72		5.58	12.73				
12 Illinois	1,283	52.05	82.73	4.0	10.36	16.75	8.1	13.70	22.29	10.5
13 Indiana	1,941	41.37	75.09	2.2	8.29	14.93	4.3			
14 Iowa	1,811	63.15	83.51	4.8	10.90	15.43	8.3			
15 Kansas	1,289	58.02	79.71	4.3	8.63	11.76	6.5	9.72	13.88	7.6
16 Kentucky	1,901	30.51	65.12	1.5	5.66	15.57	3.7	5.02	11.70	2.8
17 Louisiana			44.92			11.63			10.30	
18 Maine	4,083	62.24	68.45	1.6	11.16	12.19	2.8	12.70	13.26	3.1
19 Maryland	4,907	36.63	57.31	0.7	10.58	16.55	2.2			
20 Massachusetts	5,287	85.02	99.32	1.6	16.60	18.71	2.9	23.80	26.92	3.9
21 Michigan	3,336	55.78	81.75	1.6	9.00	14.51	2.7	12.75	20.69	3.9
22 Minnesota			145.59	1.7		22.23	2.5		21.25	3.0
23 Mississippi	1,140	13.60	26.66	1.0	5.01	9.83	4.7	5.07	11.60	4.4
24 Missouri	1,282	42.23	87.32	1.8	6.27	15.46	3.4			
25 Montana	5,266	58.98	73.35	1.1	18.40	24.43	3.5			
26 Nebraska	1,630	107.23	137.33	6.7	13.47	17.27	8.0			
27 Nevada	1,207	40.72	27.03	3.4	14.24	15.18	10.9			
28 New Hampshire	4,179	74.15	110.43	1.7	12.02	15.90	2.3	14.26	17.93	3.1
29 New Jersey	2,347	31.91	59.92	1.3	7.54	13.92	3.3	4.81	9.02	1.7
30 New York	4,804	60.76	78.34	1.2	12.79	17.60	2.6	15.22	21.07	3.1
31 North Carolina		16.61	30.74							
32 Ohio	2,818	63.41	90.31	2.3	11.39	16.38	3.9	14.50	21.03	5.1
33 Oregon	3,388	93.66	122.62	2.6	16.68	20.81	4.5	11.78	16.08	3.4
34 Pennsylvania			78.50	1.6		11.92	3.6		20.07	4.1
35 Rhode Island	6,445	53.52	85.27	1.0	11.06	16.51	1.8	12.25	18.48	2.0
36 South Carolina			27.70	0.7		12.06	2.8		5.30	1.2
37 Tennessee	2,519	22.24	38.97	0.9	6.27	11.23	2.5	5.82	10.21	2.4
38 Texas	1,991	24.61	56.55	1.2	6.74	15.39	3.3	5.36	12.84	2.7
39 Utah		45.06	105.54		5.56	12.86		5.79	13.38	
40 Vermont										
41 Virginia	2,984	25.87	41.19	0.9	6.51	10.37	2.2	6.22	9.89	2.1
42 Washington		121.32	122.14		16.14	16.25				
43 West Virginia	2,422	38.24	56.30	1.5	7.67	11.29	3.3	10.03	14.77	4.2
44 Wisconsin	2,394	44.24	63.98	1.9	8.86	14.13	3.7	8.85	13.78	3.6
45 Wyoming			168.74			28.59				
North Atlantic Division <i>a</i>	4,405	60.79	80.09	1.4	12.77	16.50	2.8	16.21	21.13	3.3
South Atlantic Division <i>b</i>	3,518	27.56	47.88	0.8	8.68	14.23	2.5	8.55	13.97	2.5
South Central Division <i>c</i>	2,318	21.71	52.36	1.0	5.33	13.62	2.6	4.57	11.39	2.1

a Comprising Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania.*b* Comprising Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, and Florida.*c* Comprising Kentucky, Tennessee, Alabama, Mississippi, Louisiana, Texas, and Arkansas.

TABLE 23.—*Summary by States, Geographical Divisions, and Classes According to Population of Comparative Statistics of Property, Expenses for Tuition, and Receipts from Local Taxation of Public School Systems of Cities and Towns containing over 4,000 Inhabitants—Continued.*

State or Territory.	Total Assessed Value of Property of Cities and Towns Per Capita of Population 6-14.	Value of School Property Per Capita of—		Ratio of Value of School Property to Total Assessed Valuation of Cities and Towns.	Cost of Supervision and Teaching Per Capita of—		Cost of Supervision and Teaching in Mills per Dollar of Assessed Valuation.	Amount Received from City and Town Taxes Per Capita of—		Amount Raised by City and Town Tax in Mills per Dollar of Assessed Valuation.
		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.		Population 6-14.	Average Attendance.	
1	2	3	4	5	6	7	8	9	10	11
North Central Division <i>d</i>	\$2,167	\$55.07	\$83.94	<i>Per cent.</i>	\$9.87	\$15.95	<i>Mills per dollar.</i>	\$12.56	\$20.07	<i>Mills per dollar.</i>
Western Division <i>e</i> ..	4,360	62.91	104.48	2.4	14.72	24.02	4.3	6.42	10.77	5.6
Cities of first class (population 200,000 and upward)	4,093	51.19	81.70	1.4	12.37	19.01	3.3	14.67	22.88	1.5
Cities of second class (population 100,000 to 200,000)	3,032	33.95	83.90	1.4	7.81	16.81	2.8	7.83	16.30	3.3
Cities of third class (population 50,000 to 100,000)	3,503	58.23	82.60	1.7	11.26	15.79	3.2	15.38	21.22	2.6
Cities of fourth class (population 25,000 to 50,000)	2,956	53.35	86.01	1.9	10.19	15.69	3.3	11.00	17.40	4.1
Cities of fifth class (population 10,000 to 25,000)	2,259	58.51	80.98	2.4	9.72	13.74	4.2	11.22	15.71	3.6
Cities of sixth class (population under 10,000)	2,547	54.85	69.48	2.3	10.18	12.53	4.2	11.38	14.57	4.8
United States ..	3,285	52.64	80.54	1.6	10.85	16.29	3.2	12.77	19.41	4.7
										3.6

*d*Comprising Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, Dakota, Nebraska, and Kansas.

*e*Comprising Montana, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Idaho, Washington, Oregon, and California.

CHAPTER IX.

THE TRAINING OF TEACHERS.

Professional schools educate but a minority of the teaching body—Impossibility of obtaining statistics and information as to the character of "institute" instruction—An examination of the proceedings of teachers' meetings instituted, for expressions of opinion on the condition of the teaching body—The characteristics of such associations—Their value—Problems of the year—Chairs of pedagogy—Normal schools—Institutes—The Illinois institute syllabus—Local supervision of teachers—The College for the Training of Teachers in New York City—The Peabody Normal College—Proposed national normal college—Physical and manual training—What and how normal schools teach—The Peabody Fund—The meagre salary excludes the professionally trained teachers from the country school—The State normal schools do not supply the demand in cities—Do the graduates teach?—Not improbable that the annual demand for beginners is about equal to the number teaching who have attended a normal school—Attendance at public normal schools for 1887-88—Graduates—Permanent funds—Tuition—Average annual cost of board and lodging—Receipts—Statistics of private normal schools—Kindergarten training schools—Condition of normal schools and the work of other instrumentalities for qualifying teachers with extracts from the proceedings of their annual meetings for 1887-88, by States—Statistics of individual public normal schools, Table 32—Of individual private normal school, Table 33—Of individual schools for training kindergarten teachers, Table 34.

AN EXAMINATION OF NORMAL SCHOOL WORK NOT SUFFICIENT.

It is well known that the annual catalogue of institutions of every kind is not, in the great majority of cases, a record of the events of the year. It is not intended to be such; its purpose is avowedly to give information concerning the school as a place where education may be obtained, not to chronicle the vicissitudes of the year. It will therefore be seen that it is not from such a source that information as to the condition of the profession of teaching is to be found; nor would such information, if found there, be complete. An examination of the following pages will show that normal schools furnish but a small proportion of the teachers of the public schools; the vast majority have never received professional training. To educate this majority a peculiar and American institution has been established called an institute. In this, at annual intervals, the teachers of the county or "institute district" are assembled for periods varying from one week to four or more, and receive instruction of uncertain kinds at the expense of the State, the county, or, in some cases, in part at their own expense.

The activity of these two agencies for the professional training of the teacher and the intending teacher, and the results, might give some idea of the quality of the teaching in the schools were it possible to gauge the exact value of institute instruction given to adult pupils for one or more weeks in a manner varying with the locality and to a number which may be all, many, or a few of the teachers of the district embraced. Such statistics are as yet impossibilities as far as this Office is concerned.

But there is a third institution for the training, at least cultivation, of teachers that we have heretofore neglected, and this is the teachers' association. Not that it is to be assumed that all the teachers of the State or county belong to these annually convened assemblies; far, unfortunately, from that. But because in following their discussions we may get at least some idea of the condition of the educational affairs of the State. There is another advantage that is to be considered; the proceedings of these meetings are for the most part printed in the school journals, and we are thus relieved from the necessity of awaiting the publication of reports, which so long delays our own.

In the last report of this Office the presentation from the catalogue point of view was exhaustive, the normal school and its course of study were defined, and the origin and methods of the institute given. We will, therefore, assume that the reader knows that as one turns from contemplating one of these schools to another, a never-changing view is presented, kaleidoscopic in all save symmetry, and that institutes shade down from professional through elementary instruction until they degenerate into a parliamentary assembly; and, in view of this assumption, will proceed directly to considering the events of the year, first, however, making a few remarks on the varieties of the associations formed by those engaged in the profession of teaching.

TEACHERS' ASSOCIATIONS.

Even undertakers have an association, says Superintendent Palmer, of Alabama; why not the teachers? The idea is not new, and the many pedagogical associations of Germany have been thought by some to have been a great influence in forming the pedagogical part of that most pedagogical nation, where, as Grimm says; teachers are as common as monks in Spain or Italy. Alumni associations are formed primarily on memories of the past not unconnected perhaps with anticipations of more material pleasures annually, and joint-stock companies for the purpose of material profit; but the association of teachers is founded on a desire for professional improvement and is a matter of pecuniary loss; how great, we are unable to say. The editor of the Iowa School Journal computes that the expense to the teachers of attending the 96 Iowa institutes of the year in that State would be \$200,000 including instruction and examination fees.

These associations meet annually with but few exceptions, and it is inevitable that, unless avoided by the most capable management, the proceedings of meetings held at such comparatively frequent intervals should become monotonous, or there is danger that, in the effort to avoid common-place, the speakers may consult their imagination for the ideal rather than the common experience of themselves and their hearers, in an effort to assist them to "kick against the adamant of things," as Carlyle characteristically says.

That dullness or fancy does not necessarily preside at these gatherings, the paper by the California professor, given under that State, will show, and any one reading his glowing tribute to the country teacher—where the battle for education is being fought as that for manual training is being fought for in cities—will fully acquit him of a tendency to be unsympathetic; while the address of the president of the superintendents' section of the Ohio association shows that it is as valuable to collate opinions as to add another to the many on the list, and the warm language of the president of that association—so warm indeed that we stopped where he really began—that it is not necessary to be dull.

To give definiteness and force to the expression of opinion on matters of moment, committees are formed in some associations to which are referred the topics upon which it is necessary to have a formal expression of view. In some cases the committees report during the same meeting, in others at the following one.

But the tendency to specialization is, in all likelihood, the most potent force in association work. When it has produced an association of persons following the same profession it immediately begins to group the members, and superintendents' sections, primary sections, and college sections are the results. Even the Michigan association, if our authority be right, where what is good for one is deemed good for all, has yielded so far as to organize a primary teachers' department. Nor is this wheel-within-a-wheel system apparently altogether satisfactory, for we find that superintendents' associations, city and county, are quite common, while the teachers, turning from the smooth Latin-English word association, denominate themselves a "club" or a "round table." This change of name very likely denotes something more than the desire for variety of nomenclature. The meeting of the club at least may have something of the alumni dinner in it, while the round-table gathering exchanges the rostrum for the easy-chair.

The direction of its educational affairs is entirely in the hands of the State, its power pervading its territory to the imaginary lines or natural features by which it is defined. But the teachers of the States have not found these impassable. Seven degrees forty minutes west longitude from Washington does not avail to keep the city superintendents of Indiana from meeting those of Ohio when they have a mind to, and the headwaters of the Potomac have been ineffectual to prevent the West Virginia association from meeting in joint convention with the Maryland organization, which meeting was so satisfactory that the two associations appointed a committee of five to attend the meeting of the associations of Pennsylvania and of Kentucky and to invite those associations to return the compliment.

Not only is a community of professional thought and feeling uniting the teachers of the central States of the East, but a spirit of human sympathy has caused the teachers of Baltimore to organize a "Beneficial Association" with the object of mitigating the evils that are apt to overtake the recipient of a comparatively small salary when ill, and, in case of death, to pay a sum of money to those he leaves behind. A similar association in New York City goes even farther; members who retire after having taught for thirty-five years, in the case of women, and forty years in the case of men, receiving aid from a fund composed of one-half of all receipts. The State superintendent of California calls for a pension for teachers, and the teachers of Alabama are providing a "home" which would appear to be, however, a place to recuperate at rather than to retire to.¹

¹ There is a similar society in Texas, but we are obliged to postpone an account of it until our next Report owing to the late day at which the information came to hand.

Before leaving the subject of providing for the future of the teacher who has spent his life in his profession we shall give some statistics from the last report of the State superintendent of New Jersey. Of 3,919 teachers of whom a record was obtained, 565 had taught between 10 and 15 years, 339 between 15 and 20, 142 between 20 and 25, and 118 over 25 years.

As to the value of association to teachers, of hearing discussions, should any one doubt either as factors of improvement, after acknowledging the status and power that otherwise humble individuals as a body possess, let him consider their value as a corrective of conceit arising from mental isolation, the "*intellectus sibi permissus*," as Bacon calls it in a somewhat different connection, and in addition the following inquiry from John Stuart Mill: "What does any one's personal knowledge of Things amount to, after subtracting all which he has acquired by means of the words of other people?"

REVIEW OF THE DISCUSSIONS OF THE YEAR.

It is evident that the American educational world has been agitated during the year by the question of providing for the improvement of the country school, manual training for the city school, better supervision, better curriculums, and better teachers; the last, above all, since it is only through the teacher that all directly is done. Whether in the last analysis the pittance paid to the country school teacher is the cause of the unsatisfactory condition of country schools, is a problem of political economy, and whether manual training is the result of poor teaching rather than the inevitable results of intrinsically poor methods, is a problem of pedagogy, and to the learned in these sciences we leave both. The manual training movement, as such, however, is fully treated in another chapter.

The question of better teaching embraces, of course, all the tentatives toward answering it, and among these we will include local supervisors, and this includes their manner of appointment. What is said is particularly applicable to the rural school where the demand is greatest, the city school having run through the gamut of improvement on the old line and is now seeking to improve along a new. More than one-half of the schools of Pennsylvania are yet ungraded country schools.

CHAIRS OF PEDAGOGY.

First in order among the demands for providing for the professional training of teachers, though not the most important, is a chair of pedagogy in the State University. This is what is sometimes meant by "a more intimate connection between the public schools and the higher institutions." These are urged by Professor McGrew, himself a professor of the science and art of education at the University of the Pacific, as being of inestimable value to the public schools; by Professor Heston, of the State College of Pennsylvania, as best answering the question, "What can the university do for the common school, since they would graduate competent superintendents and normal school professors;" and by Professor James, of the University of Pennsylvania, as supplying teachers for "our higher schools and college." As Mr. James is speaking of the academic class of teachers with whom we are less familiar we will give the reasons which cause him to think teachers so trained to be needed in such institutions.

"There is a great need of such training, as is evidenced by the fact that the average teaching in such schools is far below what it might be and should be in point of efficiency. As a class the actual teachers in our schools [high schools and colleges] are to a large extent men and women, who are looking forward to entering some other occupation as soon as practicable, and are devoting their whole time to preparation for such work. * * * It is evident that the work of such a class as this can not be of a very high character when tried by any fair test of efficiency. It is also evident from any close examination of the work actually done. Any director or head-master will tell you in close confidence that it is very easy to get teachers, but very difficult to get good teachers." That it is possible to remedy this by special college or university courses, Mr. James thinks is proven by the experience of Germany.

NORMAL SCHOOLS.

But it seems to be admitted that it is not feasible, at least not probable, that all teachers will be professionally educated at a college. The rank and file must be trained in the normal schools, which the president of the recently founded New York college thinks are not professional schools at all in the sense that a school of medicine, or law, or theology is a professional school.

In all cities not having a school of this kind there is loud demand for a school or training class, "an indispensable adjunct to a good school system," says the superintendent of Baltimore. We have given an account of the growth of one of these on page 425 under Massachusetts.

The environment of the city normal school is such as to afford every opportunity for empirical proficiency, and as it is quite usual to draw its members from the graduates of the high school, practical experience, maturity in years, and an academic foundation are insured. It will be observed that the principal of the Philadelphia school protests against the admission of those who are comparatively children (p. 444).

But the case with the "normal school" as a State or isolated institution is somewhat different. "Medical schools teach medicine; law schools teach law; theological schools, theology; what do or rather what don't normal schools teach," inquires the eminent president of one of them whose valuable article we have depended so much upon as relieving us from treating the subject at length.¹ In fact it is most decidedly evident that men engaged in the profession, first defining professional instruction in a concrete way, by instancing that given in a school of medicine, law, or theology, are demanding that normal schools give professional instruction too.

In California, in Minnesota, and in Wisconsin, a system of normal schools obtains; but founded under less advantageous circumstances, the schools of New York and Pennsylvania are not so completely a part of the State system. The State superintendent of New Hampshire describes the change of the school of that State from an academy with a normal class attached to a normal school (p. 433), but from what Superintendent Draper says the academic features of the schools of New York can not be honorably removed unless a "new contract or bargain" be made with the locality in which each is situated.

In leaving this class of schools we will call the reader's attention to the abstract of the proceedings of the normal department of the National Educational Association at Chicago, to the remarks of the president of the New York College for Teachers, and to the remarks under the several States, especially to Superintendent Draper's statement that "normal work of a lower grade and less in extent must be had to supply the wants of the rural schools," which, to use the sarcastic language of a superintendent of Pennsylvania, "doctors of pedagogy" neglect, and distinguished visitors foreign and domestic are never taken to see.

TEACHERS' INSTITUTES.

But important as they are normal schools have not been nearly so much discussed during the year as institutes, the means of educating the teacher whose qualifications are for the most part, we believe, that he has passed an examination on the matters he has been taught and is to teach. In medicine those who practice without a knowledge of anatomy are called quacks, and to prevent possible quackery is the fundamental purpose of the institute; it is to train as teachers those who are teachers by reason of their knowledge of the elements of learning, and not from their ability to impart them.

The effort to give the institute a character that will enable it to accomplish its object is most determined. Under the heads institutes and teachers' meetings, in the accounts of the condition of the teaching body in the States of California, Illinois, Indiana, New Hampshire, New York, Ohio, Pennsylvania, Virginia, and Wisconsin, will be found remarks more or less extended relating to this matter.

It is evident that the inherent defect of this class of schools is the short duration of session. One can not examine a science in forty-five minutes any more than one can learn to use a language in a half dozen weeks, as is fatuously promised now and then; and we find both Professor McGrew and Superintendent Draper striving to remove this objectionable feature. Mr. McGrew proposes, and his proposition seemingly met with the approval of the teachers of the State, that the institute be a professional school with a session of four weeks and a continuous course of study running through three or four years. Mr. Draper, *facile princeps* in efforts to improve the teaching body, announces that it is the intention to arrange a course of institute work "which shall be continuous from year to year and year after year for three or four years," thus obviating annual repetition and chance.

This bold and comprehensive plan can not be too much admired. It has all the virtues that the graded course has over the ungraded, with the additional value that the ever-vivifying and reimpresing incidents of the school-room will help the teacher to digest the professional diet of the institute. But it is clear that if the course is of three or of four years there must be three or four concurrent classes of different grades; how these are to be provided for the gentlemen do not say, or even in fact mention them.

During the discussion of the county teachers' institute at the forty-third annual convention of the Ohio association, Superintendent White said that he would make no compromise with that class of teachers who demand that the institute shall be a means of preparing them for getting a teacher's certificate. Indeed, it is evident that the institute is being looked upon as a "professional school." But as such it must have a course of study. The facility with which a warm imagination can outline a scheme of work, the embarrassment of a practical, though logical, mind in arranging its details and the

difficulties the firmest will has in overcoming impediments to its operation, are nowhere better shown than in the inception, completion, and execution of the plan of study called a programme.

One of the earliest, if not the first programme for an institute was prepared by the State board of education of Indiana in 1881. In 1883, there being a demand for "another outline," the State superintendent appointed a committee composed of five county superintendents to prepare, under his direction, the plan of county institute work for that year. So manifest was the value of the programme when tested in the institutes of Indiana that Superintendent Holcombe was also authorized to appoint a similar committee to assist him in preparing an outline of work for the township institutes of the State. The programme, or "Township Outline," thus inaugurated has become "a leading factor in educational progress;" but before examining it as prepared for the forthcoming year, it is advisable to briefly note the character of the early programme for county institute work.

This had the form of a programme of a school. There were five days of work, each beginning at 9 in the morning and closing at 4 in the evening, with an interval of an hour and a half at noon. In a school, however, the whole of first day is consumed in organization; in these institutes one hour was considered sufficient for the purpose. Forty minutes of each day was devoted to the "Science of Teaching." The subject-matter of this topic was distributed under five heads, as follows:

1. *The school defined.*—Its purpose is to prepare for independent activity in the other institutions of society; its method of accomplishing its purpose is by training the will, by inculcating habits of observation and reflection, and by imparting scientific knowledge of practical value.

2. *Conditions of the school.*—The hygienic conditions without and within the school, the physical and mental conditions of the teacher and pupils as related to school work.

3. *Mental processes employed in learning.*—Discrimination, its conditions, cessation from mental labor, products of exercising the faculty. Remembering, its pedagogical importance, conditions and laws, is founded on attention. Seeing arguments, the faculty of noting similar elements in different things; that is, of forming general or abstract ideas, the basis of classification. Construction, the faculty of reproducing that which has been separated into its elements. These four are the chief processes employed in primary instruction.

4. *The order of dependence of the mental faculty involved in learning.*—Knowledge is acquired only as the memory can reproduce it; memory is dependent on concentration of the attention, and this concentration on the activity of the will, and finally the will acts in obedience to motives. "The chapter which treats of motives is one of the most important in educational psychology."

5. *Motives proper to be employed, and powerful in influencing the will.*—Motives of sense, of self, arising from our relations to others, arising from the studies of the different branches of knowledge.

The other topics of instruction at the county institutes related to the manner of giving instruction in the common school branches. We now turn to the programme of the Indiana township institutes.

"At least one Saturday in each month during which the public schools may be in progress shall be devoted to township institutes or model schools for the improvement of the teachers," recites the Indiana law on this subject. "More than four thousand of these institutes have been held during the year," says Superintendent Smart in one of his reports. The importance of these meetings is at once apparent, and their proper management becomes a matter of moment, a matter, in fact, inferior to no other educational agency in the State. In another place we have spoken of the Indiana Reading Circle and its course of study; and it is only needful to state in this connection that the necessity of making the reading circle work an integral part of that of the institute, so obvious to the promoters of circles in other States, has for some time been acknowledged and acted upon in this.

"The Township Institute," says the chairman of the committee preparing the last outline, "is a leading factor in educational progress. Its design and purpose no longer need explanation. The life of a system of schools is dependent upon the *life and growth* of its teachers. When teachers cease to grow, the schools begin to decay. The Township Institute may be made a most valuable means of growth. The chief object of an institute should be professional culture and training; its greatest aim, to impart a knowledge of the principles and methods of teaching and school management. These topics (of the 'Outline') have been selected and arranged with this view, as well as the general culture and education of the teachers and others who attend them. * * * It is recommended that not more than six topics—four besides the Reading Circle work—be selected and arranged for discussion in any one day. Each exercise should be presented by the person to whom it has been previously assigned, and conclude with a general discussion, opened by an appointed leader."

It is evident from an examination of the printed Outline that the township institute of Indiana has a continuous course of study, beginning on a Saturday of October and continued for one day of each month thereafter until March—in all, six days of institute instruction. Each day, or rather meeting, is divided into two sessions, the first of which ends at noon. We can not discern that either session has been devoted to the consideration of a special class of topics, but it is noticeable the purely pedagogical topics come just before or after the noon recess, and that the Reading Circle work—Hawthorne's *Marble Faun* being the volume for the year—is the third subject of the forenoon session. It is convenient to speak of the institutes and of the exercises in the order in which they occur.

First, or October Institute.—In the morning "Mistakes in Teaching Reading," chapters i-ix of the *Marble Faun*, "Elementary Number," and "School Government" are discussed. In the afternoon come "The Teacher's Preparation," "History of Pedagogy," "Mistakes in Language," "Literary Exercises Friday Afternoons," and finally a "Review of Longfellow's Poems," by way of an essay.

Second Institute.—"Penmanship," chapters x-xviii of the *Marble Faun*, "Elementary Number," "Methods of Instruction," come in the forenoon; "Opening Exercises" of the daily session of the common school, "History of Pedagogy," "Reading," "Germany" in its geographical, physiographical, climatic, and social aspects, and finally a written "Review of Bryant's Poems," in the afternoon.

Third Institute.—"Elementary Number," chapters xix-xxv of the *Marble Faun*, "The Recitation," "Physiology and Hygiene," and a paper on "Incentives to Study" occur in the morning session; and "Reading," "History of Pedagogy," "History of the U. S. Bank," "Vocal Music," and finally a paper as a "Review of Whittier's Poems," in the afternoon session.

Fourth Institute.—"Reviews and Examinations," chapters i-x of Vol. 2 of the *Marble Faun*, "Vocal Music," and "Reading" consume the hours of the forenoon, while "Physiology and Hygiene," "History of Pedagogy," "Primary Language Lessons," "Oral Arithmetic," and a paper as a "Review of Lowell's Writings" occupy the afternoon.

Fifth Institute.—"Drawing" is now taken up as a means of training, and is followed by chapters xi-xvii of Vol. 2 of the *Marble Faun*, "Primary Language Lessons," "Graduation from District Schools," and a paper on "The Teacher during Intermissions," which closes the morning session. In the afternoon "Reading," "History of Pedagogy," "Oliver Wendell Holmes" as an author, "Physiology and Hygiene," and finally an essay on "Indiana and her Schools, or the Teacher's Growth Professionally," follow in order.

Sixth Institute.—"Civil Government" is followed by the last chapters of the *Faun*, "Drawing" (as work this time), and "General Lew Wallace and his Writings." In the afternoon "Primary Language Lessons," "History of Pedagogy," "Physiology and Hygiene," "U. S. History—Accession of Territory to the United States," and a paper on "What is Needed in our Educational System to Secure Respect for Common Labor and Wage-Working" complete the work of the day and of the course.

The novelty of a series of outlines for township institutes will sufficiently justify the fullness of the preceding extracts, as well as a few words further upon the manner of presenting the purely pedagogical features of the course.

The text-book used for the "History of Pedagogy" is that written by Comparyé. The course begins with Lesson or Chapter 6, and the student, after glancing at the work of Luther and Comenius and of the pedagogues of Port Royal and the disciples of Loyola, passes quickly to Rousseau and his "state of nature," the beginnings of an educational Renaissance continued and developed by Pestalozzi, Froebel, and even by Herbert Spencer, though the last gives especial prominence to the utilitarian side. We have illustrated the method of studying Mr. Comparyé's in the chapter on reading circles.

Under the head of "School Government" five topics are discussed: (1) The purposes of school government; (a) to train the pupils in self-government and self-direction, (b) to secure industry, order, and regularity in school work. (2) The teacher's qualifications, which are determination, energy, self-control, order, knowledge of the subjects taught, a preconceived plan and sympathy. (3) Means of governing, which are (a) by training the will and forming correct habits of feeling, thought, and action, and (b) punishments. (4) Parental co-operation. (5) School recreations, through botanical, geological, or archæological collections.

Under "The Teacher's Preparation," as the teacher must thoroughly know what he is about to teach, it is inquired when his knowledge should be obtained, how it should be arranged in his mind, and as to the effect on his class flowing from lack of his preparation.

Under "Methods of Instruction" the matter is arranged under three divisions: The first, which deals with "Teaching Processes," maintains that instruction aims "to occasion the pupil's acquisition of knowledge and power" and "to impart knowledge directly;" that the functions of "Drilling" are "to deepen impressions and to impart skill of mind and bodily organs, to give power to apprehend again with ease and pre-

cision, and ability of pupils to rediscover or retrace knowledge," and finally to cause the mind to act in a desired direction by repetition. "Testing" is "to disclose results of instruction and drill and to arouse interest." "The objects of the lesson in the order of importance are to instruct, to drill, to test. The objects of the recitation in the order of importance are to test, to drill, to instruct.

During the year the county superintendents of Illinois have also prepared, as a tentative, such a programme which they call a "syllabus," that is, a programme of what is to be done at a certain time and how to do it.

This work consists of sixteen sections, pedagogy, language, reading, dictionary work and spelling, penmanship, number, geography, zoölogy, botany, drawing, grammar, physiology, and hygiene, United States history, the history of the formation of the Constitution, civics, physics, and finally morals and manners. Two of these, pedagogy and language, will receive our attention by reason of their importance, but before examining them briefly we will quote from the preface of the pamphlet as to the objects which the committee had in mind in preparing the course, for it appears that there were more than one.

"The aim has been to suggest work that is practical and within the reach of all teachers. It is believed that a careful consideration of what is here presented will lead teachers to a more careful thought upon their work and upon its methods. This is the end most to be desired. It by no means follows that every teacher, as a result of such thinking, will come at once to the wisest conclusions. It takes the experience of many persons and many ages to learn all the facts and principles relating to the teacher's work. The results of these experiences may be stated to some extent in words, and the statement may save the young teacher some perplexity and prevent his falling into error, but there is no substitute for the teacher's own thinking. It is better for him to fall into some errors as the result of his own careful observation and thought, than to accept without thought the wisest counsel. Let this syllabus, then, serve its best purpose by simply arousing the spirit of honest and thorough inquiry among the teachers. * * * Let the conductor of an institute make such selection as he thinks will be best for the purpose in hand."

The work of the section on pedagogy is distributed into five topics, each occupying a part of each of the five days of the school week. On the first day in the subject of "organization" the meaning of the word is inquired into. Why can not a library be organized? Why must a school be? Why is the day's work of special importance? On the second day the arrangement of the programme is considered. How do you proceed to make it, and how closely follow it? On the third day classification is up. Why necessary, its dangers, etc. On the fourth day, the functions of the teacher as a keeper of records. How is a schedule kept, how closed? What are the advantages of marking, its disadvantages? What should the marks express? On the fifth, the official relations of the teacher and his powers are discussed. What authority to make rules, suspend, expel? Why cultivate good feeling of parents; how induce them to take interest in school?

In school management, on the first day inside work is considered. The qualifications on the part of the teacher to have the pupil tidy, noiseless, busy; to make thoughtful, attentive, truthful, and polite. On the second day outside work is viewed. Should the teacher appear on the play-ground? Should he play? How suppress the bully, foul language, and gambling? On the third day the exercises would seem to lap with those of the fifth day of the subject "organization," though dealing more with the personal atmosphere of the teacher than his powers. Why has the teacher a right to govern the school? What rules are necessary? The evils of injustice, of acerbity, moroseness, temper. On the fourth day, "What is punishment?" is asked. Why necessary? Its proper and improper forms. May it be a kindness? On the fifth day the evils of misgovernment are discussed.

If we understand the typographical indications, the above subjects are for the "lower grade," and the following two for the "higher grade." First, "qualification of the teacher." On the first day the necessary connection between a good teacher and good school is examined. What are and how deeply he should feel his responsibilities? Is the expectation of pay a proper motive? Why should he insist on a fair compensation? On the second day the professional aptness, the physical condition, and the mental and moral characteristics of the teacher receive attention. Is the best scholar the best teacher? How does ill-health disqualify him? What mental, what moral characteristics should he have? On the third day the non-professionally-trained teacher is considered. We give the text in full. "Are teachers generally well prepared for their work when they begin? Why is this so? Is it possible to make preparation for teaching before one takes charge of a school? In what ways can it be done? (Give as many as you can.) If one who begins teaching without preparation becomes skilful at last, where does he acquire his skill? At whose expense has he gained it? Could he learn a trade in this way? Why is it not done? Does it follow that one who knows a subject well can certainly teach it well? What else must he know? Illustrations: How should a

teacher's knowledge of a subject—arithmetic, for instance—differ from that of one who merely wishes to make a practical use of his knowledge?" On the fourth day the teacher as an object lesson in manners, morals, conversation, and dress, is discussed, and on the fifth the professionally prepared teacher is considered. If he makes no progress does he remain stationary? What is thought of a lawyer without a library? What advantages accrue from attending professional meetings? Can he afford these things?

In the elements of psychology on the first day the mind as a whole is considered. Are all minds alike? How can we speak of the laws of mind? What is a mental faculty? Can education give the mind any new power? How does any mental power gain strength? On the second day the intellect, the feelings, and the will are considered; on the third day, memory and the "reflective power;" on the fourth day the use to be made of the emotions and the cultivation of the will, and on the fifth day attention.

Eight principles of mind, activity, and growth are given: Health; attention; self-activity, for there is no way in which a mind can increase in knowledge or power except by its own activity; mental acquisition and power are growths and require time; ideas and thoughts are not conveyed to but formed or awakened in a mind; the crude material for all that the mind knows or thinks comes through the sense; neither knowledge nor skill is ours until it has become habit; one can express intelligibly what is understood, and the attempt to make a clear statement tends towards clearness of thought. Some characteristics of children are attention in its lower form, the use of the sense to exhibit mental activity, muscular activity, imitation, faith, curiosity, memory, imagination.

The subject of language is divided into a primary division and an intermediate division. In the first the object is to instruct the teacher how to teach the pupil to speak correctly, (1) by easy and natural conversations, (2) by judicious correction of incorrect language as it is spoken; and to compare correctly, (1) by copying words and sentences, (2) by filling blanks in sentences, (3) by dictation, (4) by making sentences, (5) by combining short sentences. A distinct perception of objects is the basis of the child's language. Hence the instructor will find ample material for accomplishing the work, in familiar objects, in the reading lesson, in number work, and in children's books.

In the intermediate division very much the same course is pursued; geography, arithmetic, and history are to contribute their share in speaking, and to written work is added better writing and business forms. In this work the teachers are to be called upon to give illustrations.

LOCAL SUPERVISION.

We believe the necessity of having a superintendent is fully recognized in cities and within a few years Philadelphia, long a phenomenon in this respect, has acknowledged the value of such an officer by creating the office. If the general proposition of business life, that the poorer the workman the better must be the supervisor, be applicable to educational affairs, it is in the rural districts and not in the cities that the greater need for inspection exists. The county superintendency has long been looked upon as having this character, but in addition to the incumbent being occupied with other duties, to the exclusion of his duty as an inspector, the charge is frequently made against him of being a politician, receiving his office as a reward of activity in the caucus rather than in the school-room. How just or unjust this charge may be we are not prepared to say, merely referring the reader to the action in Indiana, Illinois, and Kentucky, which contiguous States appear to be, to use the expression of the weather maps, the center of this storm. "Divorce educational affairs from politics" is very observably the cry there, and it refers, if we are not much mistaken, to the appointment of county superintendents, for the charge against the appointment of teachers appears to be nepotism rather than political favoritism; but these charges have nothing like the vigor and number of the demands for educational qualifications on the part of the county superintendents.

The new examination code of New York, which the State superintendent thinks the most important educational event since the adoption of the common school system, is given under New York. Two other matters occur in the proceedings of the associations calling for notice. One is the establishment of a State certificate, as asked in Texas, for instance, and the other a suggestion that a column of the county newspaper be secured for education information of local interest. The last point is briefly discussed by the president of the State association of Kentucky, p. 422.

THE COLLEGE FOR THE TRAINING OF TEACHERS OF NEW YORK CITY.

The event of the year which particularly calls for our attention is the foundation of the college for the training of teachers, through the activity of the Industrial Education Association of New York City. From the source from which it sprang tendencies toward

manual training may be inferred, and indeed the necessity of new teachers for the "new education" has been the motive that led to its establishment.

In the thirty-third annual report of the board of trustees of the New Jersey State Normal School the following language is used: "Not normal school, but tradesmen teachers required if industrial schools for teaching trades are established," and under this caption the gentlemen of the board, after stating that "Teaching industrial pursuits is beyond the scope of the operations of the State Normal School," proceed to argue the question thus:

"The object of the State Normal School, stated in the law which created the school, is 'the training and education of its pupils in such branches of knowledge and such methods of teaching and governing as will qualify them for teachers of our common schools.'

"The public school system is framed to furnish the best instruction possible to all the children of a school age in moral culture and in the knowledge they must acquire to enable them to discharge the duties of life with fidelity, to be useful to themselves, to all they come in contact with, and to the commonwealth.

"The object is to impart the foundation-knowledge required for every position in life.

"The particular kind of education which must necessarily be acquired as an addition to the foundation-knowledge imparted by the teachers in our public schools, the pupil must either during the school age, or after it, acquire from other sources and by other means than the public school-room. The foundation-knowledge, however, must be not only thorough and complete, but so extended in its reach as to afford the underlying ground-work necessary for any of the useful employments which, in this day, fertile in inventions and surprising openings for occupation, call for and require the best prepared energy and skill in manual and mental labor of both males and females.

"How to prepare by suitable and needed education those who have acquired or are acquiring the foundation-knowledge taught in the public school, for the particular employment, manual or mental, which requires instruction beyond that afforded in the public school-room, is the problem.

* * * * *

"If the time has arrived for extending by legislation on the public-school system so as to provide daily or periodical instruction in industrial pursuits of a practical substantial character, not mere theoretical teaching, what shall be the method adopted? What practical business employments shall be taught? What qualifications will be required of instructors of industrial pursuits? In what way can industrial schools be connected with the present public schools so that the attendance of pupils at the two different kinds of schools shall be adjusted? will be among the many questions considered.

"While the public school as now conducted will continue to provide the foundation-knowledge requisite, the industrial school will provide the additional knowledge to qualify the pupil for the particular employment engaged in as the life-work of the pupil.

"The special teaching that would be required in the industrial school to so instruct pupils as to enable them practically to engage in the particular business taught, as employers or employed, would require special teachers and separate schools.

* * * * *

"Should legislation be deemed practicable and wise, it has not been suggested that there should be, nor does it seem practicable to make any change in the organization or operations of the State Normal School.

"The teachers required for industrial schools would be competent persons who are or have been practically, actively, and successfully engaged in the regular business of the occupation which they are expected to teach in the industrial schools where they would be employed, a line of teaching entirely outside of that for which the graduates of the State Normal School are qualified by the instruction they receive in the institution under the care and control of this board."

The Industrial Education Association, which believes that trade training, industrial training, or whatsoever it may be called, as such, has no place in the public schools, that "they are not to teach trades but to educate,"¹ naturally differs from the trustees of the New Jersey school, and has established a college for the training of teachers, which "is a professional school, and not a normal school in the usual sense of that term. The elements of a secondary education are not taught at the college, but are required of applicants for admission."

¹ See Chapter XV.

"It was at once apparent," says Dr. Butler, the president of the new school, "that to train persons equipped for a single branch of instruction only, and not to give them the basis of a professional training, was not to train teachers, but tradesmen; the graduates of such a college could be artisans, but not artists. It was seen that the time had come to extend the application of that fundamental principle of the association's work, which I have already mentioned. Industrial training, to have its fullest value, must be an integral part of general education, so that it should include the further statement, 'the teacher of manual training should be the teacher of the other class subjects and not a special teacher.' The importance of a single teacher for each class of children in the primary school can not be overestimated. At this age what the pupils most need is a constant, firm, and consistent influence exerted upon them. If the high school plan of department teaching is carried into the primary school this influence can not be exerted, and character training is sacrificed for doubtful gain in merely intellectual progress. There is another reason why the regular class teacher should also give the instruction in manual training. Any subject which is taught by a special teacher is regarded as an excrescence on the regular curriculum, and not as standing on the same level with reading, writing, and arithmetic. It would be fatal to manual training to create the impression that this is true of it. Manual training must be an integral part of the curriculum or it should not be introduced at all."

The question, then, being not how to train teachers of manual training, but how to train teachers who shall know how to teach manual training, the association answered it by establishing this college. It is not complete yet, and "years may pass before it will be." "It is not a normal school and is not intended to be such [that is, what is usually covered by that term]. The normal schools of this country are some of them excellent, many of them poor; * * * they are academies or high schools with a slight infusion of pedagogic instruction. They certainly are not to the profession they represent what the law school, the medical school, and the theological seminary are to their respective professions. * * * The training college which this association has founded is a strictly professional school. The course of study is two years in length, and is designed solely to train broad-minded, cultured, professionally trained teachers. It is based on psychology and includes also the history and science of educating methods of teaching, including the subjects included in the term manual training, observation, and practice in the model school, the theory and practice of the kindergarten, natural science, including the construction of simple illustrative apparatus, and history."

The candidate for admission must be at least eighteen years old and have graduated from an approved high school or academy. Graduates of normal schools and colleges are admitted without examination. All other applicants are rigidly examined in arithmetic, plane geometry, history, geography, elementary science, and English. Drawing will be added in order to emphasize its importance as a school subject.

The pupils in attendance may be classified under four heads: those in the college course, 18; those called special, 86; the children of the model school, 64; and the children called special students, 508. Of the adult special students, 39 pursued a course in "industrial art;" 28, sewing; 18, domestic economy; 4, domestic economy and sewing; 4, mechanical drawing; 1, wood-working; and 1, observation and practice in a model school. Of the 104 regular and special students, but 8 were men. Dr. Butler thinks it quite safe to assume that the demand for men to introduce and supervise manual training for boys will rectify this inequality in the representation of the sexes at his institution.

The model school has a grammar grade of 20, a primary of 16, a kindergarten of 28. Of the 508 children in special classes, 116 are taught sewing, 167 domestic economy, 142 "industrial art," and 83 wood-working.

We give the programmes of the special classes below. The teachers' training course has been given above in the language of the president of the school.

Schedule of Special and Extra Classes for Adults, and Assignment of Teachers—Second Term, 1888.

Monday.	Tuesday.	Wednesday.
<p>9.30. Domestic Economy: Ladies' Class No. 3, Mrs. Sherwood.</p> <p>10.00. Sewing: Ladies' Class No. 1, Mrs. Roberts.</p> <p>2.00. Sewing: Normal Class No. 1, Mrs. Fisk.</p> <p>3.30. Domestic Economy: Normal Class No. 2, Professor Oakley.</p> <p>4.30. Industrial Art: Teachers' Class No. 1, Professor Carter.</p> <p>7.30. Domestic Economy: Cooks' Class, Mrs. Sherwood.</p>	<p>11.00. Domestic Economy: Ladies' Class No. 1, Professor Oakley.</p> <p>2.00. Sewing: Ladies' Class No. 2, Miss E. A. Oakley.</p> <p>2.30. Wood Working: Private School Students' Class No. 1, Professor Richards.</p> <p>3.30. Domestic Economy: Normal Class No. 1, Professor Oakley.</p> <p>8.00. Mechanical Drawing: Professor Richards.</p>	<p>2.00. Sewing: Normal Class No. 1, Mrs. Fisk.</p> <p>3.30. Wood Working: Private School Students' Class No. 2, Professor Richards.</p> <p>7.30. Domestic Economy: Working Girls' Class No. 1, Mrs. Buchanan.</p>
Thursday.	Friday.	Saturday.
<p>10.00. Domestic Economy: Ladies' Class No. 2, Professor Oakley.</p> <p>4.30. Industrial Art: Teachers' Class No. 1, Professor Carter.</p> <p>7.30. Domestic Economy: Working Girls' Class No. 2, Mrs. Roberts.</p> <p>7.30. Domestic Economy: Mrs. Sherwood.</p> <p>8.00. Mechanical Drawing: Professor Richards.</p>	<p>2.00. Sewing: Ladies' Class No. 2, Miss E. A. Oakley.</p> <p>3.30. Private School Students' Class No. 1, Professor Richards.</p> <p>3.30. Domestic Economy: Normal Class No. 1, Professor Oakley.</p>	<p>10.00. Industrial Art: Teachers' Class No. 2, Professor Carter.</p> <p>10.00. Wood Working: Private School Students' Class No. 2, Professor Richards.</p> <p>11.00. Sewing: Normal Class No. 2, Mrs. Fisk.</p>

Schedule of Children's Special and Extra Classes, and Assignment of Teachers—Second Term, 1888.

Monday.	Tuesday.	Wednesday.
<p>3.30. Sewing: Section 1: Miss Mahony, Miss Rode. Section 2: Miss Simons, Miss Uterhart.</p> <p>3.30. Wood Working: Professor Richards, Mr. Bloomer, Mr. Flitner.</p>	<p>3.30. Industrial Art: Section 1: Professor Carter, Miss Palmer, Miss Gorton. Section 2: Miss Trippett, Mrs. Mazzanovich. Section 3: Miss Westendorf, Miss Schüssler. Section 4: Miss Mahony, Miss Simons.</p>	<p>1.30. Industrial Art: Newsboys' Class, Professor Carter.</p> <p>3.30. Domestic Economy: Professor Oakley and Assistants.</p> <p>7.30. Wood Working: Mr. Bloomer.</p>
Thursday.	Friday.	Saturday.
<p>3.30. Sewing: Section 1: Miss Boyesen, Mrs. Guirey. Section 2: Miss Kelly, Miss Stansbury.</p> <p>3.30. Wood Working: Professor Richards, Mr. Bloomer, Mr. Flitner.</p> <p>3.45. Domestic Economy: Professor Oakley and Assistants.</p>	<p>3.30. Industrial Art: Section 1: Professor Carter, Miss Palmer, Miss Gorton. Section 2: Miss Trippett, Mrs. Mazzanovich. Section 3: Miss Westendorf, Miss Schüssler. Section 4: Miss Mahony, Miss Simons.</p>	<p>9.30. Domestic Economy: Professor Oakley and Assistants.</p>

PEABODY NORMAL COLLEGE.

Although hardly giving the late State Normal College at Nashville the character of a national institution, the recent change of name by the authority of the Tennessee State board of education to Peabody Normal College distinctly marks it as a normal college for all the Southern States—"The Normal College of the whole South." It is well known that the trustees of the Peabody Fund annually expend nearly \$33,000 for scholarships and salaries at this institution, and it should not be forgotten that Mr. Peabody's purpose was "that the benefits intended shall be distributed among the entire population [of the Southern and South-western States] without other distinction than their needs and the opportunities of usefulness to them." Animated with the justice of this consideration, and perhaps not unmindful of the benefits immediate and prospective to be derived from having an institution so powerfully supported within the borders of their State, the action above referred to has been taken by the members of the State board on their own motion.¹

The organization of this institution is highly complex. Three boards are concerned in the management; the Peabody board of trustees, which furnishes by far the largest amount of money, the State board of education by virtue of an annual State appropriation of \$10,000, and the board of trustees of the University of Nashville, who own the buildings and grounds. That conflict has been avoided, there being so many authorities, is an evidence of the subordination of personal or local feeling to the interest of the cause of education in the South.

This singular juxtaposition of authority seems to have been caused by the necessity of making the compromises ever required when the result is to be moral rather than pecuniary gain. When in 1874 or 1875 the Peabody trustees found it necessary, as it has always been found necessary, to have professional teachers, and determined to provide them by establishing a normal school and, Nashville having been selected, made

¹ It is an open secret, we believe, that when the Peabody Fund is distributed, at the expiration of the limit imposed by Mr. Peabody, a large portion of it will be used in endowing or founding a normal college.

overtures to the State Legislature of Tennessee, they were refused. The State was too poor. But the trustees of the University of Nashville gave the use for two years of its grounds, buildings, and funds to the proposed school as represented by the State board of education, and the Peabody trustees \$6,000 per annum. The principal condition exacted by the university board being "that its [the proposed school's] principal officer and his assistants should be selected and their compensation fixed by the university board." The State board accepted the proposition of the university, and stood sponsor to the school. In 1876 the \$200 scholarships for the benefit of all the States aided by the fund were established, twenty-five being offered. It was not until 1881 that the State made the first appropriation, amounting to \$5,000.

The recent death of Dr. Stearns, the head of the school, brought out sharply the question of the power of appointing a successor. The chairman of the Peabody trustees took the initiative, and appointed William H. Payne, professor of the science and art of teaching in the University of Michigan, to fill the vacancy; this nomination was subsequently confirmed not only by the Peabody trustees, but also by the two Tennessee boards. As to the question of jurisdiction there may have been a doubt, but none whatever as to the wisdom of the choice. In his report to the Peabody trustees the new president says:

"It gives me great pleasure to record the fact that only one spirit animates the State Board of Education and the Board of Trustees of the University of Nashville—that of devotion to the prosperity of the Normal College. Both these boards have not only seconded all my efforts for perfecting the organization and equipment of the college, but so far as possible have anticipated my wishes and plans, and have granted me all the material aid within their power.

"So far as I have been able to interpret the sentiment of public-spirited citizens in Tennessee and in the South in general, it is that of cordial sympathy with the purposes and plans of the Normal College. The State superintendents, particularly of the States having Peabody scholarships, are all active friends of the college, and have most cheerfully and efficiently co-operated with me in making its advantages known to the educational public of their respective States, and in conducting the examinations for scholarships according to the plans which I have proposed.

"The growth of public interest in the Normal College is attested by what I think to be a typical fact reported from Virginia; namely, last year there were twenty-three competitors for nine vacant scholarships, whereas this year there were fifty-four competitors for five scholarships.

"One of the most hopeful indications of the approaching collegiate year is the formation of a Baccalaureate class of considerable size. Most of the students who will compose this class are graduates of collegiate institutions of the South, who take this opportunity to extend their professional education. The preparation of teachers for the higher positions in the public school service of the South I take to be the characteristic aim of the Peabody Normal College; and my purpose is to raise the grade of instruction as rapidly as prudence permits. The Peabody education fund is most wisely expended in educating teachers who will occupy commanding positions where they themselves shall become the educators of teachers.

"* * * There were graduated in May, 1883, twenty-four young men and twenty-three young women with the degree of Licentiate of Instruction. As the college offers unequalled advantages for professional instruction at a merely nominal cost (\$6 a year), I hope the attendance of non-scholarship students may be gradually extended from year to year.

"Recollecting that this college is a *professional* school, and not an institution for mere academic instruction, I have organized courses of study in the theory, history, and art of education, and which are more comprehensive than those given in any other institution in the country.

"The most pressing need of the college at this point in its history is a library. A part of the necessary equipment of a high school is a library of good books; but this college is virtually without a library of modern books. The university and society libraries contain about ten thousand volumes; but these collections were made, in the main, fifty years ago, and need to be supplemented by several thousand volumes of modern books. I purpose to catalogue the existing libraries, and I shall feel greatly helped if your board will set apart a generous sum for the purchase of books. It is only with the strictest economy that the ordinary current expenses of the college can be paid from the sums at the disposal of the State and university boards.

"As you know with what reluctance I severed my connection with the University of Michigan in order to accept your call to the presidency of this college, I feel it my grateful duty to assure you that I am much more than pleased with the change I have made; and wishing to carry out the plans and purposes of your board to the extent of my ability."

NATIONAL NORMAL COLLEGE.

The necessity for trained teachers for the schools being as real as that for trained officers for the Army and Navy, the want would undoubtedly have long since been supplied had the National Government had the control of the teaching body as it has of the lighting. Although, having no jurisdiction in the matter of education, a powerful influence might be exerted by the establishment of a school for the professional training of well-educated persons by the General Government. The results of the action of the Peabody Fund trustees is an evidence of the influence that may be exerted in this way.

A bill was introduced during the last session of Congress to "establish a national university for the education of teachers," to be known as "The National University," with such a course of study as would appear to render it liable to the objections which are now being so openly made against the normal schools.

Training in the profession of teaching, it seems, is not the feature of the instruction which the institution is to afford, but a co-ordinate department; in fact, the university is but a national normal school, with the academic features that the State normal school is trying so hard to get rid of. The candidates for admission are to be versed in reading, writing, arithmetic, and to have a knowledge of the elements of English grammar, geography, and history of the United States, and there is to be a very large number of appointments, and the pupils are to be retained in the pay of the United States as long as they remain in the institution itself or teach in the schools of a State after graduation. Whether this is wholly to provide against the mean pay that teachers, especially country teachers receive, or in part to keep the ladies, one-half of the appointees, who graduate in the profession for which they have been educated, we do not know, but give the bill in full, that the reader may judge of its various provisions as the first tentative of the kind.

A BILL to establish a National University for the education of teachers.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there shall be established in the District of Columbia an institution of learning to be known as "the National University," for the purpose of educating teachers, at which shall be taught the English language and literature, mathematics, the natural sciences and mechanic arts, and particularly all such branches of education as will make students proficient in the art of teaching in the common schools of the several States and Territories of the United States and the District of Columbia, and such other studies as the board of regents of the university may prescribe. No partisan or sectarian doctrines shall be taught, and the institution shall be, in the selection of officers, instructors, and employes, strictly non-partisan and non-sectarian, and the board of regents, and all other persons participating in the management of the institution, are especially charged to faithfully observe and comply with this provision.

SEC. -. That the university shall be under the control of a board of regents, consisting of the Secretary of State, Secretary of the Treasury, Secretary of War, Secretary of the Navy, Postmaster-General, Secretary of the Interior, and Attorney-General, who shall have full power to select a site and purchase the necessary grounds in the District of Columbia for the purposes of the university. They shall have power to employ experts and other persons to lay out the grounds, make plans and specifications for the necessary buildings for the university, and to cause the same to be constructed; and also to appoint a president of the institution, who shall hold office during good behavior, and either appoint, or prescribe regulations for the appointment and removal by the president of the university of all necessary professors, teachers, and employes of the institution.

SEC. -. That the president and professors of the university shall constitute the faculty, and have the management of the university, regulate the course of studies, and grant diplomas to students who have creditably completed the course of studies, under such regulations as the board of regents shall prescribe.

SEC. 4. That the salaries of all the appointees of the university shall be fixed by the board of regents until Congress shall otherwise prescribe. And the board of regents shall have authority to employ such clerical or other assistance as may be necessary in the execution of the duties required of them by this act, and fix their compensation.

SEC. 5. That tuition, rooms, board, lodging, text-books, and stationery shall be furnished for the students by the United States free of charge.

SEC. 6. That the course of instruction shall be four years. The President of the United States shall annually appoint to the university fifty students. Each Senator and Member of Congress, including Delegates from the Territories, shall appoint to the university one student, a resident of his State, district, or Territory, as the case may be, each year. Students shall be appointed one year in advance of the time of their admission to the university, except in cases where, by reason of death or other cause, a vacancy occurs

which can not be provided for by such appointment in advance, and in case of such vacancy an appointment shall be made to fill the same by the officer whose duty it was to make the original appointment, as hereinabove provided, or by his successor in office.

SEC. 7. That both males and females shall be admitted to the university. The regents shall regulate the first appointments so that one-half shall be males and the other half shall be females, after which the appointments shall be made of the different sexes at each succeeding year, and the appointments to fill vacancies shall be so made that the number of males and females in the university shall at all times be as near equal as possible: *Provided, always*, That if the requisite number of either sex do not apply for appointment to the university, appointments of the other sex may be made without regard to the relative number of males and females in the institution. Appointees shall be admitted to the university only between the ages of seventeen and twenty-two years.

SEC. 8. That the appointees shall be examined under regulations to be prescribed by the faculty before they shall be admitted to the university, and shall be required to be versed in reading, writing, arithmetic, and to have a knowledge of the elements of English grammar, descriptive geography, particularly that of the United States, and of the history of the United States.

SEC. 9. That each student shall, previous to his or her admission to the university, take and subscribe an oath or affirmation, in the following form:

"I, A B, do solemnly swear that I will support the Constitution of the United States and bear true allegiance to the National Government; that I will maintain and defend the sovereignty of the United States, paramount to any and all allegiance, sovereignty, or fealty I may owe to any State, county, or country whatsoever."

And shall also give the following pledge:

"I, A B, hereby give my pledge of honor to faithfully observe the rules and regulations of the National University, and to apply myself diligently to the course of studies prescribed; and that I will devote my time and attention to the business of teaching for at least ten years after I shall have graduated, and will during my whole life aid the cause of education in such manner as I may be able to do, consistent with my circumstances and occupation."

SEC. 10. That students of the university, while pursuing their studies in that institution, and after graduating therefrom, while teaching in common schools or in State or Territorial institutions maintained for the purpose of instructing students in the art of teaching, and complying with the rules prescribed for their conduct, shall, in addition to any compensation they may otherwise receive for their services, be severally paid out of the Treasury of the United States the sum of twenty dollars per month.

SEC. 11. That both the students and graduates of the university shall conform to rules and regulations as to good behavior, reputable conduct, and fidelity to the cause of education prescribed by the faculty with the approval of the Board of Regents; and for non-compliance with such rules and regulations a student may be dismissed from the university, and the diploma of a teacher may be cancelled and the teacher dismissed from the service of the United States after an investigation, under such rules and regulations as the faculty may prescribe, with the approval of the Board of Regents.

SEC. 12. That it shall be the duty of the Board of Regents to require full reports from the faculty and all officers and agents appointed by them, annually, on the first day of November, and transmit the same to the President of the United States, with such recommendations and suggestions as they may deem proper.

SEC. 13. That the sum of one million dollars is hereby appropriated, out of any money in the Treasury not otherwise appropriated, for the purpose of carrying the provisions of this act into effect.

PHYSICAL AND MANUAL TRAINING IN NORMAL SCHOOLS.

"Education," says M. Jules Rochard, of the French Academy of Medicine¹, "is nothing more in the last analysis than transmitting to those who are entering life the knowledge of those who have preceded them, and the larger the fund the more complicated education becomes. Each step made in advance along the way of civilization, each conquest realized in the domain of intellect, appears as an addition on the already-overloaded school programme."

It is true that M. Rochard is speaking more particularly of the French lycée (college), but we think his remarks quite appropriate to a page that has to record the addition by the Legislature of New York of instruction in manual training to the programme of the State normal schools.

We find that these schools are objected to by the president of the New York College for Training Teachers and of the Industrial Education Association as not professional

¹L'éducation hygiénique et le surmenage intellectuel. *Revue des Deux Mondes*, 15 Mai, 1887.

schools, as not like his own, training technically persons already educated. Thus it appears that to the functions of educating and professional training is now to be added that of manual training. Besides this, it is very certain that the kindergarten is gradually becoming a part of the normal school course, although this subject, it may be said, is the beginning and a part of manual training. In addition to these the gymnasium is thought essential in preparing the teacher for professional work, as is shown by the remarks on the subject by the State superintendent of Connecticut who speaks to this effect:

"The end for which this instruction is given is not amusement nor to confer an accomplishment, but that the graduates may have sound bodies, and so be able to teach a school better; for the relation of teacher to scholar implies that the children have confidence in the teacher and that the teacher is worthy of confidence. No teacher with a weak body and resulting infirmities of mind can long retain the confidence of children. It is urged against teachers that as they advance in years under their exhausting duties they lose freshness and vigor of body and the elasticity of mind which commend them to the young. Ill health is apt in addition to absorb the attention of the sufferer and a desire for higher professional attainments has no place."

In his last report the State superintendent of California observes: "Every one will admit that a teacher should possess scholarship, training, and culture. He should also possess a sound body. Good physical strength and ready flow of animal spirits are requisites in the teacher, that he may be able to withstand the nervous strain and command the attention and respect of his pupils. Without this his work will necessarily be defective, unsatisfactory to his pupils, and painful to himself."

Manual training in any of its elementary forms, wood-working in the upper grades, and the exercises of the manual training school properly so called, not being classed as elementary, is not a substitute for gymnastic exercises. It furnishes tangible objects of thought, but while exercising the mind, is not equally adapted to exercising the whole body. And the presence of many ladies at these schools, two-thirds of their enrolment, causes difficulty when the attempt is made to supply the necessity for physical exercise; that is, exercise given in a systematic way with a definite end in view; for them calisthenics and the lighter gymnastics are adapted as they are not adapted to men.

The French physician from whom we have quoted, after observing that overpressure in schools is the question of the day, and that recently it had been carried to the Academy of Medicine and even to both branches of the French Legislature, and that the "American formula," which, dividing the day into three equal parts, devotes one of them to study, is the best, proceeds to make some suggestions as to the means through which the hygienic education may be obtained in the case of boys.

Eight hours should be given, this author thinks, to meals, the toilet, recreation, bodily exercise, and music and dancing, etc. Recreations (plays) ought to be longer and more utilized, because the students engage in them spontaneously when time and encouragement is given, nevertheless it is well to insist upon physical exercises which are not play properly so called. Gymnastics should occupy the first place in such exercises on account of its accessibility and the variety of movements it permits. It will not be difficult to render the work attractive, but it is necessary to remind the instructors that the pupils are to be made vigorous and agile and not acrobats "or clowns." To give regularity to the instructions it is necessary to have two gymnasiums, one under cover and the other in the open air, as has been done at the Lycée at Vanves. "The necessary complements of gymnastics," continues the author, "are fencing, horseback riding, singing, and swimming. The first is an excellent exercise.¹ Independent of the vigor, agility, and precision of movement that it develops better than anything else, it gives to young people a confident and easy air much more becoming at their age than the stooping form of those who have grown pale over their books. Horseback riding has its place in a liberal education for the same reasons, while swimming is of all exercises the best for hardening the body. It calls into play muscles which are habitually in repose and develops the chest by the deep and long inspirations which the process demands. These efforts are not accompanied by loss (*dépédition*), since they occur in cold water, and to the muscular activity is added the tonic effect of the cold bath. Useful to all men, swimming is necessary to those who live upon the shore of or near a river. It is astonishing that so many persons are found in the pavy who can not swim. Singing has not the same importance, but it is very useful in developing the lungs, and of all the æsthetic recreations (*arts d'agrément*) it is the most hygienic. Hygienists are unanimous in asking that it be accorded the place in education that it ought not to have lost."

¹ "Those who are cribbed, cabined, and confined by office work and the wearing life of towns find that fencing is as near as possible to perfection as an exercise. Encouraging, as it does, self-control, forbearance, fair play, and most of the minor virtues of good breeding; admirable as a training-school for the quick eye, the ready wit, and the light strong hand, * * * it is only just that fencing should be called the fine art of athletics."—Henry Eckford, in the *Century* for January, 1887.

It is not necessary to say that the hygienic education given at our normal schools has but one, perhaps two, of the features advocated by the French physician, gymnastics and singing. From the returns made by principals we find that gymnasiums are not uncommon, and calisthenic exercises are quite frequently a part of the school work either daily or at intervals during the week. In several instances a special teacher is employed.

Manual training has been introduced into several schools, taking the form of wood-working for men, and cooking and sewing for women, and "construction work." In several instances we are informed that preparation is being made to introduce the subject.

Under the head of Pennsylvania (p. 444) we have given a brief account of the introduction of cooking into the normal school of Philadelphia.

PROCEEDINGS OF THE NORMAL DEPARTMENT OF THE NATIONAL EDUCATIONAL ASSOCIATION AT CHICAGO, 1887.

The president, Mr. Taylor, in opening the meeting spoke of the value of conventions. When physicians convene they find profit in listening to the experience of others in treating disease. Why should not they meet to discuss the means and methods of mental growth? They had theory and fragmentary reports, but the rank and file are not finding them helpful. In the speaker's intercourse with teachers a lack of acquaintance with pedagogical authorities was most noticeable, and they practiced the best methods with so slight a comprehension of their value that a smile or sneer would cause them to be discarded. The science of pedagogy has no Kent, no Blackstone yet. Rousseau should be read, we are told, but he was a mere dreamer, is added; Pestalozzi should also be read, but he is an enthusiast; Froebel all should know, but then he must be adapted; Rosenkranz is great, but hard to digest, etc. Of course it would be unwise to follow any one author blindly, but as the teacher does follow some kind of authority is it not proper that he should know what the more experienced in the profession recognize as wisest and best? "We meet and talk and resolve, but do we accomplish what we might for the humble toilers in the 250,000 school-houses in our land?" This service was not to be accomplished in one year or in five. It was begun at the preceding meeting and was to be continued at this. The reports to the association should be digested that teachers might utilize it. The profession looks to the normal schools to examine, sift, and value the new methods, factors that are constantly appearing. Let there be a consensus of opinion put in plain language to serve as an authority to which teachers can appeal in their contests with patrons, boards of control, and superintendents.

President Gray, of the St. Cloud State Normal School, discussed the "Methods of instruction in the normal schools of the United States." He regarded this as the most vital question before the normal schools. He had prepared and sent out a series of thirty-two questions in May, 1887. Of the one hundred and seventy-five schools bearing the name normal to which the questions were sent, seventy-four were returned in such shape as to make them of value. He had no thought of generalizing on the data; that was a dangerous process to any but the most patient observer of facts. Impressions, then, not judgments, were to be given. His paper may be briefed under the following heads:

What do not normal schools teach?—He found forty-seven different terms used to describe the course or courses of study in these schools. Excluding those differing in name only, a large number remained to show how chaotic are the curricula in schools nominally existing for the training of teachers. If the normal schools would have themselves respected as technical schools they must have technical courses.

Methods.—Forty-eight schools report a special teacher in methods; four, "all are such;" two, "several;" two, "five," and one, "eight." A course in "methods" is usually a course in the common-school branches, but a few cover everything by this term, even psychology and even practice teaching. The fifty-seven schools answering the question as to what subjects are taught under methods and as to a special teacher of them, regard the subject as necessary in a normal course. The time given varies all the way from two to twenty months. The average time for the fifty-seven schools may be placed at eight months, one recitation daily, though throwing out the time given to mental science this average is reduced to six months.

Psychology.—Out of the seventy-four schools reporting fifty-nine have mental science, in a large number of cases without the text-book. The average of fifty-eight schools is about four and one-half months, a lesson daily. In twenty-two schools mental science precedes "methods," in nineteen it follows, and in thirty-one accompanies (thirteen answering so as to be counted twice). Not more than ten seem to have concluded that psychology is the foundation upon which the art of instruction is built.

Practice teaching.—Fifty-five schools have practice teaching done in a school of chil-

dren, and these, variously called "training schools," "practice schools," or "model schools," are nearly all connected with the normal school. Twenty-two have student-teachers' practice upon a class made up of the classmates of the pupil playing teacher. Twenty of the twenty-two schools are not very favorable to the plan, some decidedly unfavorable. "Like Hamlet, with Hamlet left out," says one. The average time devoted to this for forty-eight schools is about one hundred and seventy-five recitation hours of forty-five minutes each; a very few schools reaching four hundred to five hundred hours, apparently of sixty minutes each. This seems to be the *sine qua non* of professional training, and out of the sixty-one schools placing a high value on practice teaching, fifty-seven are State or city institutions. It seems that under competent supervision this work is not so bungling a process as is the work of the untrained teacher without such supervision. The practice is placed as far along as possible following methods and psychology.

Observation.—About half the schools report observation as a part of the course, being usually a part of the system of criticism in which the pupil teacher is by turns critic and teacher. In some cases this system has been forced upon the school from lack of children to form a sufficient number of classes. Many schools declare that the time spent in "observation" is wasted; others have abandoned it for actual teaching. The schools valuing it agree in saying that the teacher must be prepared "to observe," "must know what to look for." The average time taken in the schools reporting is three and a half months.

Other professional studies.—Forty-four schools report history of education as a part of their course, giving it three months and a quarter. Forty-six include school economy and devote to it, on the average, three months. Thirty-four have introduced the science or philosophy of education, devoting to it, on the average, three and one-third months. Forty schools think a kindergarten desirable; nine not; only seven have one.

The answers generally agree in recommending the catechetical method for children, for advanced work, and for testing pupils; the topical, for older people, to cultivate freedom of expression and logical arrangement, and as supplementary to the former. The lecture method is used in advanced grades only and re-enforced by catechetical and topical review. Questioning is the art of the teacher, all admitting its value. A few schools require a plan of operations to be drawn up by the pupil in the method or practice class preparatory to work, but most require nothing beyond a general statement of subject matter and plan, leaving the adaptation to the inspiration of the moment. To avoid parroting almost all replying would refer every special method or device to its underlying laws.

The answers to the last two of the questions, calling for the characteristics and causes of failures of normal schools, are discussed by Mr. Gray in the following terms:

"After fifty years of growth it would appear that the normal school has not taken the rank in this country that its assumed importance would lead us to expect. Either there is, or there is not, a necessity for such schools. The answers generally agree that the normal school trains teachers; that their aim and outlook are quite different from other institutions; that they are technical schools in education, as schools may be found in medicine, law, and theology; but when we come to the replies upon the causes of failures there is a general wail because of a lack of appreciation on the part of the public, a lack of intelligence among legislators, a lack of preparation in scholarship among the students who enter, a lack of sufficient time for professional work, because of too much academic work, too much preparatory work, too little skill on the part of normal teachers, etc. The impression one gets in studying the replies to these questions is that the normal schools are not satisfied with the work they are trying to do. They are under restraint. What they would do they do not, and that which they would not they do. * * *

I want to take time to remark that in my judgment we, the normal school men, are more directly responsible for the estimate upon our work than any other persons. * *

* When the friends of the theory that teachers can be trained as well as ministers and doctors demand such training on the part of those in high places, the absurdity of the untrained superintendent in charge of the trained subordinate will be done away with. * * * In a word, the way in which to make good the assumption underlying our schools is to make it disgraceful for business colleges, academies, high schools, seminaries, colleges, and universities to masquerade under the name of normal schools to catch gudgeons and fill their treasuries, to the shame of a noble calling, and to place our schools upon the basis of a liberal course of study, to be supplemented by a liberal course in the science, history, and art of education."

Professor De Ganno's paper on the German system of normal schools we hope to use in connection with work for a subsequent report, and will proceed to consider the paper of President Albee, of the Oshkosh school, on "Conditions of Psychology in Normal Schools," premising that as the paper is not on the *condition* of psychology in our normal schools we may be brief.

Institutions, said Mr. Albee, are embodied ideals; then of what ideals is the normal

school the phenomenon? Systematic education is but the purpose of the present, "to transmit to immediate posterity all the vantage of its highest conceptions of manhood, and its clearest views of the determinate lines on which human progress must be made," and the normal school is of recent origin only in the sense that its latest phase is necessitated by its environment. This striving to guide the rising generation along lines of least resistance was no less definite among the Hebrews than among us. Two kinds of obstacles impede late efforts. First, immaturity and mediocrity flock to the normal school to be made up or made over again, in the briefest time, entailing a limitation in culture and methods which has strongly tended to fix its necessities as the permanent ideal governing normal schools and determining their province. Second, the habits of thought engendered while gaining the indispensable acquisitions of knowledge are not favorable to introspection. The mind has done well to observe and infer, without turning aside to analyze, the modes and causes of its activities; and, in addition, to the half-grown intellect rules are a necessity to satisfy the craving after the definite, causing the obvious and immediate to exert undue influence, and the teacher to exalt direct teaching and instruction above its merits when compared with the excitation and infiltration of thought through its manifold less prominent relations. One favoring influence must not be overlooked. In the normal school much more than in the college the sentiment prevails that psychology is the foundation for all high excellence in teaching, making it a profession and not a trade. As outlining the attitude the normal school men should assume or avoid, three statements may aid: First, psychology must not be pursued simply as one branch among the multitude of other subjects needed in rounding out scholarship, to be as a mere acquirement; second, it should not be treated as a field for sharpening the pupils' wits by comparing opposing theories; but let it, third, be taught as the general science underlying all school work.

THE PEABODY FUND.

The most important event to be noted in this connection is the resumption by Dr. Curry of the office he formerly held. During the interregnum (we know of no better term to express the interval) Dr. Green, the secretary of the board of trustees, did double duty, being secretary and general agent *pro tempore*.

The amount distributed by the trustees for the year beginning with October, 1887, has been \$67,600. Of this sum \$22,800 has been granted to the Peabody College at Nashville, in the shape of one hundred and fourteen scholarships and \$10,000 in gross; in all, \$32,800. To other normal schools \$13,000 have been granted, and for institutes \$11,400. The rest went to several public schools.

The distribution of the scholarships at the Peabody College at Nashville is as follows:

Alabama.....	13	Tennessee.....	14
Arkansas.....	10	Texas.....	9
Georgia.....	14	Virginia.....	14
Louisiana.....	8	West Virginia.....	8
North Carolina.....	14		
South Carolina.....	10	Total (value \$200 each).....	114

To the States individually were distributed the following amounts:

States.	For Normal Schools.	For Institutes.	States.	For Normal Schools.	For Institutes.
Alabama.....	\$3,000.00	\$1,000.00	Tennessee.....	\$10,000.00	\$1,200.00
Arkansas.....	1,500.00	1,500.00	Texas.....	2,000.00	
Georgia.....	1,200.00	1,200.00	Virginia.....	2,500.00	2,000.00
Louisiana.....	2,000.00	1,000.00	West Virginia.....	1,000.00	1,500.00
North Carolina.....		1,000.00			
South Carolina.....	2,500.00	1,000.00	Total.....	23,000.00	11,400.00

a In addition to the scholarships.

The courses the annual apportionments have taken are most clearly shown by the following statement, prepared for the secretary by a member of the finance committee:

Distribution of the Income from the Peabody Education Fund from 1863 to September 30, 1888.

Years.	Alabama.	Arkansas.	Florida.	Georgia.	Louisiana.	Mississippi.	North Carolina.	South Carolina.
1868.....	\$1,000.00	.....	.....	\$8,562	\$8,700	\$1,338	\$2,700	\$3,550
1869.....	5,700.00	\$4,300	\$1,850	9,000	10,500	9,000	6,350	7,800
1870.....	5,950.00	11,050	6,950	6,000	5,000	5,600	7,050	2,950
1871.....	5,800.00	9,200	6,550	3,800	12,400	3,250	8,950	2,300
1872.....	9,900.00	12,250	6,200	6,000	11,500	4,350	8,250	500
1873.....	6,000.00	11,400	7,700	13,750	.....	6,800	9,750	1,500
1874.....	9,700.00	3,600	9,900	6,300	2,750	6,700	14,300	200
1875.....	2,200.00	1,500	1,800	9,750	1,000	5,400	16,900	100
1876.....	5,500.00	1,000	1,000	3,700	2,000	9,950	8,050	4,150
1877.....	4,600.00	6,300	5,900	4,700	3,000	5,990	5,100	4,400
1878.....	830.00	5,900	3,200	5,400	4,750	500	4,100	2,250
1879.....	2,800.00	8,250	2,600	4,400	7,000	2,600	6,900	5,000
1880.....	350.00	3,000	1,000	1,300	4,100	3,600	2,450	1,300
1881.....	1,090.00	2,500	300	1,600	4,200	1,400	3,335	2,000
1882.....	3,110.00	3,300	1,900	4,390	3,400	1,400	4,900	3,800
1883.....	3,700.00	2,800	1,925	3,500	1,700	1,900	6,150	4,075
1884.....	3,900.00	2,000	1,100	2,500	800	1,400	3,900	2,750
1885.....	3,800.00	1,500	1,500	2,000	2,800	.....	3,230	4,400
1886.....	6,900.59	3,300	.....	2,500	4,000	.....	4,400	11,400
1887.....	3,500.00	2,400	.....	2,000	4,000	.....	3,000	5,500
1888.....	3,500.00	1,500	.....	1,200	2,000	.....	1,000	4,500
Total.....	89,800.59	97,050	61,375	102,552	95,600	71,378	131,365	74,425

Years.	Tennessee.	Texas.	Virginia.	West Virginia.	Normal College, Nashville.	Scholarships Normal College, Nashville.	Total.
1868.....	\$4,800	.....	\$4,750.00	.....	.....	.....	\$35,400.00
1869.....	11,900	.....	12,700.00	\$10,900	.....	.....	90,000.00
1870.....	15,050	\$1,000	10,300.00	13,000	.....	.....	90,500.00
1871.....	22,650	.....	15,950.00	9,150	.....	.....	100,000.00
1872.....	23,250	.....	29,700.00	17,900	.....	.....	130,000.00
1873.....	27,800	.....	36,400.00	15,750	.....	.....	136,850.00
1874.....	33,100	1,000	31,750.00	15,100	.....	.....	134,600.00
1875.....	24,150	1,350	23,350.00	10,500	\$3,000	.....	101,000.00
1876.....	7,100	4,450	17,800.00	8,600	3,000	.....	76,300.00
1877.....	7,050	7,150	17,550.00	6,810	15,000	\$1,800	95,750.00
1878.....	4,100	8,050	13,450.00	5,100	5,000	1,900	64,500.00
1879.....	3,100	9,000	8,850.00	4,000	11,000	12,300	87,800.00
1880.....	1,900	15,250	5,700.00	3,000	13,000	10,400	66,350.00
1881.....	2,500	9,050	4,150.00	2,000	4,000	25,975	64,100.00
1882.....	3,800	14,950	2,059.41	2,350	8,000	16,150	73,509.41
1883.....	3,400	12,600	2,625.00	2,550	9,500	20,700	77,125.00
1884.....	1,750	5,500	4,000.00	2,000	9,900	21,200	62,700.00
1885.....	1,700	4,500	4,565.00	2,000	10,100	20,970	63,065.00
1886.....	1,200	2,500	6,000.00	3,800	10,000	18,500	74,500.59
1887.....	1,200	2,500	4,500.00	3,000	10,500	24,300	66,400.00
1888.....	1,200	1,000	3,000.00	1,500	4,000	12,800	37,200.00
Total ...	202,700	99,850	259,549.41	139,010	116,000	186,995	1,727,650.00

STATISTICS OF THE YEAR.

We are sure that any one who is inclined to deny that words as signs of ideas are *things* of the very highest importance would be convinced of his error had he one of the annual forms of inquiry sent out by this Office to make up and to note the great variety of acceptations in which apparently the most leading questions may be taken by gentlemen of intelligence and learning. It seems impossible to phrase a series of questions so that each will be understood by the majority and yet not misunderstood by a few. "As I expected would be the case," says President Gray, of the State Normal School at St. Cloud, Minn., "some of the questions [to a circular inquiry lately sent out by him] were not understood by all alike, owing to the different meanings attached to words;" while Superintendent Gillespie, of the Nebraska Institute for the Deaf, in commenting on one of the answers to a certain inquiry sent out by him, says that he *thought* that all understood the phrasing in the same way. Some of the most important inquiries on our form for normal schools are useless from this cause.

But the statistics of normal schools are only a co-ordinate section of this chapter, and represent the operations of the machinery for producing more or less professionally trained

persons for teachers. Do they tell how many of the graduates teach and how long? Have we any reliable information of the number of men and women who taught during some part or the whole of 1886-87, and were teaching for the year under review? How many new classes have been added to each system?

In default of these essentials of comparison, the statistics of normal schools, being out of relation with the demand for the service of those they train, are of no value in showing how the balance between supply and demand is maintained; and this, we take it, is their value. We are not entirely without statistics, however, as to these important points, and though they are but the most meagre they are not inadequate, for they all agree in pointing the same way, the variations occurring being caused by local circumstances.

But we would not venture to use these fragmentary statements had we not consulted the recorded experience of men in the field. Of statistics, indeed, it may be said as Bacon says of studies, "they teach not their own use, but that is a wisdom without them and above them won by observation."

DO THE NORMAL SCHOOL GRADUATES TEACH?

From cities and towns not having normal schools or classes the cry is persistent for one; the State normal schools are not meeting the demand. And yet "It is idle to think that the time and money involved in pursuing a normal school course will be given to obtain the miserly salary of a country school, with the probability of losing that before a year," says Superintendent Draper, of New York.

Thus, according to Mr. Draper, the salary of the country school excludes the graduate of a normal school, and yet, this large field of activity being closed, the cities are asserting with the utmost positiveness that the State normal schools are insufficient to supply their local need. Under such circumstances the inquiry, "Do the graduates teach?" is suggested, an inquiry that from its frequent repetition is heard with some impatience by the president of the Winona State Normal School.

Leaving out the much canvassed fact that about 70 per cent. of the attendance at the normal schools of the country are females and that their assumption of the marriage relation involves their withdrawing from the profession of teaching, we find that with men it is merely used in many cases as an expedient to a better and more lucrative employment, not to say profession. It is evident that a talented lawyer, physician, or theologian is socially and financially of much more account than a talented school-master. Thus we are constantly reminded that the interest that each has for his own advancement and reward is not suspended in the case of the profession of teaching, that ability will not see itself passed in the struggle for reputation and wealth, content because doing good; for that is a celestial, not a business virtue.

The constant inquiry at every session of the Minnesota Legislature as to the service—two years in that as in most States—performed by the graduates of the normal schools, an inquiry instigated by the belief that the obligation is not fulfilled, has wholly or in part caused a thorough canvass to be made of the professional activity of the graduates of the Winona school. This canvass was conducted through the class historians of the alumni association of the school. From every class reliable data has been obtained, showing "that the average term of service of all graduates has been five and one-half years for each person, or nearly three times the service required by the State, and about twice the average term of service of all other classes of teachers. About five per cent. only have not taught. Nearly all of these have secured their release from the pledge by paying to the school the full amount of the tuition for the time they were in attendance. Less than two per cent. have failed to redeem their pledges.

"There are now teaching in this State," says the State superintendent of New Jersey, "three hundred and three graduates [of the State school], this being about 26 per cent. of the whole number, and about 64 per cent. of the number of graduates within ten years."

As the tuition at this class of schools is free on the condition that the pupil obligates himself to teach in the schools of the State for a certain period, generally two years, it would seem inevitable from a purely logical standpoint that the graduates would become teachers or perjurers unless buying themselves off. The last two classes, as we have seen in the case of the Winona school, are very small, too small for notice if the investigations cover the whole period of the school's existence since 1860; but it is the average time of teaching that claims our attention.

Assuming that the statistics of the Minnesota school are typical of the class, a type, not an average obtained by huddling the high and the low together and striking a mean in a Procrustean way, they may be viewed, we think, in two lights, which for convenience of reference we will call the practical view—the limitations of manner of selection, entrance examination, facilities of "completing an education," and short term of obliga-

tion being considered—and the professional view. As the first of these is the fairest, we will briefly consider it.

In establishing these schools it is proper to assume that the civil authority was acquainted with the need that it was called upon to supply, and that in supplying it it used the most effectual and immediate method. If two years were established as a term during which the pupil was to teach in the State it must have been deemed an equivalent for the instruction given for two years or so at the school. And if that term is lengthened to five years, as at the Winona school, it follows that the State has more than doubly been paid.

The professor of didactics at the University of the Pacific can only say for these schools that they have done not a little good in preparing academically trained teachers for the schools; the president of the New York College for Teachers, that they only give a tincture of professional training; while the principal of the Castleton (Vt.) school says that training in the studies the pupils are to teach is all that is necessary. For the last gentleman our so-called practical view is also the professional view; for the others something more than a comprehension of facts is necessary; they demand a knowledge of the child.

But in a professional sense the term of five years of teaching is far from satisfactory. It is quite the fashion to compare the profession of teaching with those of medicine, law, and theology. Those who engage upon these studies look upon them as a life-long occupation, as a profession, not to be followed for a few years only. This brings us to the consideration of the length of service of the members of the teaching body, and we will now turn from examining normal schools as feeders of the teaching body and canvass the professional character of that body.

EXPERIENCE OF TEACHING CORPS.

Although not possessing statistics for the whole country in respect to the length of service of the teachers, the educational antecedents of the teaching corps of the several States, and the vacancies that occur annually, we have found a few statements on these matters which we will bring together here, speaking first of the length of service.

In Pennsylvania, exclusive of Philadelphia, the number of teachers having taught for five annual terms is 8,370, nearly 40 in every hundred of the teaching force; in New Jersey the proportion is 55 in every hundred; in New Hampshire 1,582 schools were taught by the same teacher for two successive terms, about 51 in the hundred; in Minnesota 727 teachers had taught in the same district for three years or more, about 10 in the hundred. And now, having exhausted our supply of statistics on this point, we turn to the professionally prepared element of the teaching corps.

NORMAL ELEMENT IN TEACHING CORPS.

We have a sufficient number of cases in which statistics on this point are at hand to tabulate them. In considering the table, the exceptional character of the showing made by Massachusetts is very apparent, and the inquiry is at once suggested whether the professional character of her teaching force is to be attributed to two other features of her system; namely, the great fullness of her term, and the high salary she pays her teachers, this State being among the foremost as to the first and the foremost as to the second feature.

State.	Percentage of—		State.	Percentage of—	
	Normal School Graduates.	Those having attended Normal School.		Normal School Graduates.	Those having attended Normal School.
For 1887-88:			For 1885-86:		
California.....	20	.....	Connecticut (1886-87).....	(13)	.....
Minnesota.....	8	18	Kansas.....	4	.....
Wisconsin.....	(17)	.....	Maine.....	10	.....
Michigan.....	2	17	Massachusetts (1886-87).....	25	31
Texas (estimated).....	11	.....	New York.....	(4)	.....
Pennsylvania.....	8	18	Rhode Island.....	(26)	.....
New Hampshire.....	12	.....	West Virginia.....	(23)	.....
Vermont.....	10	14	Arizona.....	(9)	.....

In examining the material for the year we have found several statements as to the institutions at which the members of the teaching force received their education, and as it is in line with our remarks we insert them:

Of the 3,996 teachers of Vermont 3,092 report the character of the institution in which they passed "the last year of their preparation for teaching" which the State superintendent classifies thus—

	Percent.
In colleges in the State.....	35 }
In colleges in other States.....	49 }
In academies in the State.....	1,179 }
In academies of other States.....	162 }
In high schools in the State.....	652 }
In high schools of other States.....	82 }
In normal schools in the State.....	451 }
In normal schools of other States.....	61 }
In district schools.....	439 }

In Pennsylvania the proportion is as follows:

	Percent.
Graduates of normal schools.....	1,716.....08
Attended normal schools.....	3,651.....18
Graduates of colleges.....	233.....01
Educated in secondary schools.....	5,719.....23
Educated in common schools.....	9,630.....45
Total reporting, excluding Philadelphia.....	20,329

The school committee of Johnston, R. I., give a list of the schools at which their teachers have been educated, as follows:

Rhode Island State Normal School.....	17
Providence High School.....	9
Friends' School, Providence.....	2
Massachusetts State Normal School.....	1
High School, Cambridge, Mass.....	1
High School, Dennis, Mass.....	1
High School, Oswego, N. Y.....	1
Noire Dame Academy, Worcester, Mass.....	1
Lapham Institute, North Scituate, R. I.....	1
Plain Farm Grammar, Johnston, R. I.....	1
Mount Pleasant Academy, Providence, R. I.....	1
Brown University, Providence, R. I.....	1
Total.....	37

It has been their aim, the Johnston committee say, to secure, as far as possible, teachers from the State Normal School.

At Newport, R. I., of the fifteen or sixteen teachers employed during the year but five or six have had professional training.

BEGINNERS.

We have now arrived at the last topic of the discussion upon which we have entered. Perhaps, in view of the foregoing statistics, it is not too bold to say that between ten and twenty per cent. of the teaching corps of the country are at least tinctured with professional ideas, and we come to consider how many more of such or their betters are required annually.

During the last year the Connecticut State Normal School graduated sixty-two pupils, all of whom are teaching. These, says the State superintendent, have supplied one-sixth of the beginners for the year in the State. It follows, then, that the beginners number about 372 in Connecticut; that, is about 6 per cent. of the teaching force.

The State superintendent of New Jersey gives statistics of the "number who have been teaching one year or less." As his report ends August 31, it is evident that the "year or less must have begun in the fall of the preceding year or at some subsequent date, provided the experience was continuous, which under the circumstances we unhesitatingly assume. The 431 teachers of this class are therefore beginners; the whole number reporting length of service was 3,919 (about 100 less than the whole number employed); that is, 11 per cent. were beginners. In Michigan during 1887, 14 per cent. of the teaching force had been licensed without previous experience in teaching. In Pennsylvania the "number who have had no previous experience" as teachers was 3,112, exclusive of Philadelphia; that is, about 15 per cent. of the teachers in county and district schools.

The State superintendent of West Virginia gives it as his opinion that one-fourth of the teaching force of his State has to be renewed annually, and the city superintendent of Minneapolis, in urging the establishment of a city normal school, calls attention to the

lesser permanency of service there than in eastern cities. In Iowa, about thirty in every hundred teachers were beginners (3,946 totally without experience, 3,671 less than a year's).

Investigations of this kind, even when as unpretentious as this, seem a waste if not leading to some positive conclusion, and when such a conclusion is avowedly stated as a conjecture from insufficient facts rather than as a fact, it would appear better to avoid "pusillanimously passing it by," as Mr. Spencer says in his book on education. Under such circumstances, it appears to us that there is a demand for as many professionally trained teachers as the normal schools have put permanently in the field, from the standpoint of the present, during the fifty years of their existence.¹

PUBLIC NORMAL SCHOOLS.

Attendance.—By the summary, given below, of the statistics of Table 32, 32,314 pupils are shown to be in 133 schools; these are not all under training as teachers, however. In "teachers' training classes" were enrolled 17,319 pupils, distributed among 112 schools. Rejecting from the total attendance (32,314) at these schools the number attending the schools not reporting teachers' training classes or pupils attending them, we find that of the 26,113 attending schools where the training course for teachers exists, 17,316 are in that course and 8,797 are not. How far the 8,800 are "model school," "practise school," or "training school" pupils, we can not positively say, but it is our belief that the request that scholars to be practised on and pupils below high-school grade be kept distinct, has been complied with, and that the full statistics of Table 32 show it. To state the matter in a less precise way, one-third of the pupils attending normal schools are not reported in teachers' training classes.

It must be borne in mind that we are now speaking of the so-called public normals, a class founded on the very obvious feature of receiving aid from public funds to the amount of five hundred dollars or more, and that this has caused schools to be included that perhaps make the statistics on their face give some confirmation of the general statements as to the non-professional character of this class of schools.

Considering the total enrolment in the schools, we find 69 per cent. of it composed of females; considering the enrolment in the teachers' training course, we find a slight increase of the disproportion, the percentage of females being 70. Though it is quite true that all the schools are not represented, it will be remembered that we are given a proportion, and that if it be of value it will hold with but slight variation though all the non-reporting schools were represented.

Instructors.—The instructors, 1,189 in all, are also unevenly divided between the sexes, but the disproportion is not so great, being 42 to 58 in the hundred in favor of women. This inequality does not appear confined to any particular section of the country; but it is uniform and large in the New England and Middle States, including the neighboring States of Ohio and Maryland.

As compared with the statistics of the preceding year, there is an apparent gain of a thousand in the total number of pupils enrolled, and a slight decrease in the number of instructors.

¹It is interesting to compare this conclusion with that arrived at by Mr. S. H. White, principal of the city normal school of Peoria, Ill., as given in his paper, read before the American Normal Association in 1870. This writer, in the course of his remarks, says:

"According to the report of the State superintendent of common schools of Pennsylvania * * * 30 per cent. of the teachers of that State are new to the work each year. The opinion of other State superintendents have been asked upon this point. So far as they have been expressed they are that from 10 to 50 per cent. of the teachers in their respective States are annually supplied from those who have had no experience. It is probably safe to say that, taking all sections of the country into consideration, this number would be about 40 per cent."

TABLE 29.—*Teachers and Pupils in Public Normal Schools (Summary of Similar Columns of Table 32).*

State.	Instructors.			Schools Re- porting.	Pupils in School.			Schools Re- porting.	Pupils in Training Class.		
	Male.	Female.	Total.		Male.	Female.	Total.		Male.	Female.	Total.
Alabama.....	33	33	66	7	{ (302) 367 }	479	1,148	6	{ (78) 130 }	202	410
Arizona.....	1	0	1	1	12	18	30	1	12	18	30
Arkansas.....	6	3	9	2	328	242	570	1	152	42	194
California.....	12	21	33	3	100	577	977	2	100	877	977
Connecticut.....	3	28	31	3	5	496	411	3	5	401	406
Dakota.....	6	13	19	2	106	173	284	2	89	157	246
District of Co- lumbia.....	{ (7) 2 }	5	14	2	6	74	80	2	6	74	80
Florida.....	4	2	6	2	61	48	109	1	32	26	58
Illinois.....	23	24	47	3	{ (619) 502 }	682	1,803	3	322	618	940
Indiana.....	{ (3) 21 }	10	34	3	472	512	984	3	350	442	832
Iowa.....	4	8	12	2	122	316	438	2	122	316	438
Kansas.....	7	6	13	1	246	423	669	0			
Kentucky.....	1	5	6	1	0	39	39	1	0	39	39
Louisiana.....	6	10	16	2	11	165	176	1	3	28	31
Maine.....	9	17	26	5	214	514	728	4	124	436	560
Maryland.....	3	7	10	1	32	273	305	1	3	78	81
Massachusetts.....	25	60	85	10	107	1,373	1,485	9	75	1,053	1,128
Michigan.....	18	8	26	1	248	466	714	1	31	86	117
Minnesota.....	11	34	45	5	322	666	988	5	{ (265) 203 }	374	842
Mississippi.....	3	3	6	2	87	50	137	2	87	50	137
Missouri.....	28	26	54	5	810	926	1,736	5	539	651	1,190
Nebraska.....	7	7	14	2	168	387	555				
New Hampshire.....	1	8	9	2	0	95	95	2	0	95	95
New Jersey.....	6	9	15	3	23	292	315	3	23	292	315
New York.....	54	129	183	13	{ (581) 486 }	3,699	4,766	11	{ (476) 199 }	1,579	2,254
North Carolina.....	8	3	11	4	193	233	431	2	68	65	133
Ohio.....	{ (9) 9 }	15	33	5	107	275	382	5	88	264	350
Oregon.....	{ (8) 3 }	7	18	3	{ (367) 47 }	60	474	1	(178)		178
Pennsylvania.....	{ (16) 95 }	107	218	14	2,294	4,280	6,574	11	983	1,324	2,307
Rhode Island.....	3	4	7	1	8	151	159	0			
South Carolina.....	1	4	5	1	0	17	17	1	0	17	17
Tennessee.....	11	20	31	3	301	373	674	3	156	195	351
Texas.....	10	6	16	2	214	210	424	2	214	210	424
Vermont.....	4	15	19	3	{ (185) 40 }	148	373	3	{ (185) 40 }	148	373
Virginia.....	9	48	57	3	498	555	1,053	2	39	131	170
West Virginia.....	12	15	27	6	486	428	914	5	215	141	356
Wisconsin.....	21	46	67	5	426	871	1,297	5	394	836	1,230
Total.....	{ (43) 480 }	668	1,189	133	{ (2,054) 2,449 }	20,811	32,314	112	{ (1,182) 4,842 }	11,295	17,319

Graduates from these schools have been spoken of above. For the year under review they number 4,381, an increase of 825 over the preceding year, as far as reported. By sections the number is distributed as follows:

	Graduates for 1887-88.	From Beginning.
North Atlantic Division.....	2,334	34,083
South Atlantic Division.....	265	2,805
South Central Division.....	359	2,313
North Central Division.....	1,096	12,229
Western Division.....	277	2,025
Total.....	4,381	53,455

Permanent funds and income.—The inquiry as to permanent funds and the interest derived therefrom has produced but meagre results. In some cases it appears that the question was not understood in the usual way. In ten instances a fund has been reported, in two of these, however, merely as so much land. As far as reported, these funds amount to \$1,858,204, \$1,642,562 of which are reported by the States of the northern Mississippi Valley and \$1,300,000 of this by the State of Wisconsin. The income derived from these funds is about \$50,000.

Tuition.—The charge for tuition to persons preparing to teach, and promising to teach in the State after graduation, is nothing. Exceptions to this statement appear in Table 32, but they are only apparent. In the first place, the charge of ten dollars or less is almost always in the form of an incidental fee, and in this way also is the twenty dollars charged at the Missouri schools to be accounted for. At the Southern Illinois Normal University students pledging themselves to teach in the State are instructed free of charge for tuition, and at the Virginia Normal and Collegiate Institute fifty State students are instructed under similar conditions. At the Vermont school each town is entitled to one scholarship or more, each scholarship paying one tuition of \$24. Pennsylvania, which appears most to contradict the statement, has a rather unique way of giving free instruction, which obtains in this way: To a student over seventeen signing a declaration that he intends to teach in the common schools of the State fifty cents a week (half the charge for tuition) is given, and to each student who shall graduate and sign an agreement to teach in the common schools of the State two full years, fifty dollars. Thus, during a session of forty weeks, though the charge for tuition is forty dollars, the student is paid twenty dollars by the State, and this deficit is more than offset by the fifty he receives at the end of two years' study. The charge to non-resident normal students and to others need not detain us, and we will proceed to consider the

Average annual cost of board and lodging.—The usual averaging process will not avail here. We must use other means, and that which has been adopted is the grouping of the amounts falling within a maximum and a minimum limit. The limits adopted are these: Instances where the annual cost is \$75 or under down to \$50, where it is \$100 or under to \$75, \$125 or under, \$150 or under, \$175 or under, etc. In eleven cases the annual cost of board and lodging is reported at amounts varying with the school, from \$50 to \$75; in fourteen cases the cost varies with the several institutions from \$80 to \$100; in twenty-six cases it varies from \$100 to \$125; in twenty-three cases from \$130 to \$150; in six cases from \$155 to \$175, and in eight cases from \$189 to \$200.

As the cost when \$100 or under to \$75 is with an exception almost the higher amount, the \$75 to \$100 group may be combined with that containing the cases falling within \$100 and \$126, and the new group thus formed will constitute 46 per cent. of amounts reported. Combining this group with that containing amounts of \$150 and under down to \$125, it appears that nearly three-fourths of the answers to the inquiry as to the average annual cost of board and lodging fall about or between \$100 and \$150.

Receipts.—The total receipts of the schools classed as public normal are \$1,671,761,¹ several city schools not reporting. Of this very nearly \$200,000 were derived from the incidental fees, pupils not entitled to free tuition, and the amount—more than half of the whole—derived from tuition charges at the Pennsylvania schools, of whose peculiar manner of financial procedure in the way of State aid of pupils we have spoken above. The amount received during the year from public funds was \$1,240,197 and from "other sources" \$96,431. The discrepancy of \$135,000 between the sum of these several amounts and the sum total received has been occasioned by the failure in some cases to answer the inquiry as to aid from "other sources." In cases where it has been answered, however, it is doubtful whether tuition fees or benefactions received have not been given. These items, however, though of interest, are of little importance. In a table of public normal schools the aid from the public is the main feature.

Between the amount received from the public funds for the present year and that granted in the preceding there is a difference of about \$100,000, when the schools not reporting in both years have been excluded. In Pennsylvania there has been an increase of \$30,000. In Dakota and Michigan there have been decreases, respectively, of \$40,000 and \$60,000.

But this is not the proper way to compare these statistics. Periods greater than one year must be taken to ascertain the drift of educational things. We will on this occasion go back for five years when the appropriation was \$1,071,520; but as this included an extraordinary appropriation of \$120,000 for the Virginia Normal and Collegiate Institute, which reports this year, as it has ever since 1883-84, an appropriation of \$20,000, we find ourselves warranted in throwing out from the sum appropriated then the overplus of \$100,000. Thus reduced the sum appropriated for 1883-84 is \$971,520, leaving a gain in the five years interval of \$269,000.

¹ Not including \$15,000 of schools reporting last year but not this.

TABLE 30.—*Aid from Public Funds and Other Sources (Summary of Similar Columns of Table 32).*

State.	Amount Received from State, County, or City.	Value of Property, Including Apparatus.	Aid from Other Sources.
Alabama.....	\$34,500	\$191,760	\$3,250
Arizona.....	7,500	10,134	.....
Arkansas.....	8,420	83,650	325
California.....	53,750	582,500	.....
Connecticut.....	17,000	132,000	.....
Dakota.....	30,200	140,750	.....
Florida.....	8,000	3,800	.....
Illinois.....	79,554	725,500	.....
Indiana.....	24,500	66,850	.....
Iowa.....	13,600	101,050	.....
Kansas.....	20,850	104,500	.....
Kentucky.....	2,600	20,300	.....
Louisiana.....	13,600	.....	2,000
Maine.....	20,116	96,240	.....
Maryland.....	10,500	152,500	.....
Massachusetts.....	55,280	395,790	.....
Michigan.....	38,173	180,765	302
Minnesota.....	50,000	382,200	.....
Mississippi.....	4,000	71,300	9,000
Missouri.....	55,893	510,150	1,965
Nebraska.....	44,000	118,075	.....
New Hampshire.....	9,000	52,500	.....
New Jersey.....	20,000	565,000	.....
New York.....	281,469	1,719,616	305
North Carolina.....	6,500	6,500	.....
Ohio.....	11,000	50,000	.....
Oregon.....	.....	27,100	.....
Pennsylvania.....	115,000	1,934,713	27,821
Rhode Island.....	12,500	41,500	.....
South Carolina.....	1,500	.....	.....
Tennessee.....	8,700	191,500	41,500
Texas.....	45,500	53,250	2,000
Vermont.....	7,493	33,083	1,160
Virginia.....	40,329	630,600	2,000
West Virginia.....	13,770	169,825	2,850
Wisconsin.....	61,408	356,000	1,953
Total.....	1,240,197	9,846,898	96,431

STATISTICS OF PRIVATE NORMAL SCHOOLS.

In examining the summary of the statistics of public normal schools we found that 66 per cent. of the enrolment of schools reporting students in a teachers' training course were in such course. Applying the same methods here we find that 50 per cent. of the enrolment are in such a course. Should the statistics of two schools—neither reporting this year but reporting in a somewhat different form very large enrolment in "normal classes" for 1886-87—be excluded from the divisor and dividend used in obtaining this percentage, it appears that about 31 per cent. of the total attendance of the private normal schools reporting a teachers' training course are pursuing such course. In brief, about one-third of the pupils in private normal schools are under training as teachers.

There is another feature, the male element preponderates both in the teaching corps and the attendance, and without exception as far as the totals indicate.

These institutions seem more numerous in the States of the Central and Upper Mississippi Valley, thirty of them, including that in West Virginia, being situated in this area. In the Southern States there are nine, in California one, in Pennsylvania one. Of students below the high school grade there are eighteen hundred and eighty-six, the sexes being about equally represented.

TABLE 31.—*Instructors and Pupils in Private Normal Schools (Summary of Similar Columns of Table 33).*

State.	Instructors.			Number in School.			Number in Teachers' Training Course.				
	Male.	Female.	Total.	Schools Reporting.	Male.	Female.	Total.	Schools Reporting.	Male.	Female.	Total.
Alabama	2	10	12	2	148	247	395	2	10	17	27
California	11	4	15	1	150	100	250	1	20	70	90
Georgia	4	4	8	2	111	124	235	2	33	57	90
Illinois	27	12	39	4	{ 890	{ 660	1,835	2	125	171	296
Indiana	{ 13	{ 9	50	3	{ 2,555	{ 1,853	4,408	3	{ 2,003	{ 1,333	3,336
Iowa	{ 37	{ 21	71	7	{ 1,517	{ 1,094	3,011	6	{ 110	{ 222	1,132
Kansas	10	3	13	1	{ (650)	{ (800)	650	0			
Kentucky	14	5	19	2	{ 113	{ 53	971	1	26	29	55
Michigan	3	0	3	1	30	20	50	1	11	10	21
Mississippi	4	4	8	1	129	127	256	1	(131)		131
Missouri	3	3	6	1	70	60	130	1	25	20	45
Nebraska	3	8	11	1	47	55	102	1	15	10	25
North Carolina	6	3	9	1	72	83	155	1	25	30	55
Ohio	{ 15	{ 7	34	5	519	343	862	4	366	247	613
Pennsylvania	6	0	6	1	102	99	201	1	93	97	195
South Carolina	5	13	18	3	383	457	840	3	27	26	53
Tennessee	2	10	12	1	176	143	324	1	106	131	237
Texas	(11)	11	1	1	(113)	113	113	1	(13)		13
West Virginia	3	5	8	1	74	53	127	1	30	20	50
Wisconsin	10	2	12	2	100	14	114	2	56	14	70
Total	{ 178	{ 64	365	41	{ 7,186	{ 2,298	15,079	35	{ 3,036	{ 944	6,534

Graduates, tuition, etc.—As far as reported 219 pupils were graduated during the year; the volumes in the libraries numbered 32,843, and the value of property, including apparatus, was \$1,231,103. The productive funds amount in all to \$145,500, belonging, with one exception, to schools in the Southern States. The income from these funds amounts to \$9,200.

The charge for tuition is not high, ranging from \$25 to \$50, generally between \$30 and \$40, though in several cases falling so low as \$8 or \$9, and even \$6. Boarding and lodging in the most cases fall about or between \$75 or \$100 rarely exceeding \$150.

The total amount received by these schools from all sources was \$175,602, of which \$97,877 are specifically given as tuition fees, and \$26,157 from other sources. The amount derived through gifts and bequests was \$20,320.

KINDERGARTEN TRAINING SCHOOLS.

In examining each peculiar kind of education it is ever found that one of the most important impediments to its early progress was a want of teachers. Pupils are abundantly present; that almost anything will do for a school-house is annually complained of, but that there is a decided lack of *teachers* is but too evident. When the form of education is not commonplace, as in kindergarten or manual training work, it is difficult to get even makeshifts, and the particular form of education is retarded by having poor teachers or no teachers.

Mrs. Kriege's kindergarten training school was the first of its kind. We are under the impression that it was a training school properly so called. Since that date, 1868, many schools or classes have been established, some of them no doubt being formed to familiarize the pupils with the practical operations of the work rather than to inculcate Froebelian principles as a theory giving such activity a meaning. What a candidate for a kindergarten teacher's certificate is expected to be acquainted with in Philadelphia will be shown by the following examination papers for September, 1887:

Theory and practice of the kindergarten.—(1) State the principles which distinguish Froebel's philosophy of education from the systems of other educational reformers; (2) Describe the second gift, and explain what is intended to be accomplished by it; (3) What are the specific objects which the kindergarten seeks to attain in the education and train-

ing of the child? (4) *Weaving*, one example showing the first five steps; (5) *Pease work*, make a pentagonal prism; (6) *Paper cutting and mounting*, invent and make a geometric pattern with colored papers; (7) *Paper folding*, make the first fundamental form five times, and then convert all of these but one into four different forms.

Drawing.—(1) Make an outline drawing of a cat, of a lily; (2) Draw an outline representation of the group of models placed in view; (3) Make a picture to illustrate a story of which the following is a synopsis: Mary lived in a pretty house in the country. She took her slate and started off for school. She saw a rabbit near the lane as she went along. The rabbit sat up to look at Mary and she stopped to look at the rabbit.

Modelling in clay.—(1) How would you prepare dry clay for the children to work with? (2) How would you take care of the clay? (3) Develop the square pyramid, beginning with the sphere; (4) Model a basket containing apples; (5) Make a high relief model of a pear.

Geometric forms.—(1) Classify triangles according to their sides and their angles, illustrate with figures; (2) Classify four-sided figures, illustrate; (3) Explain the development of the cone; (4) Make a paper form of a cube; (5) Make a paper form of a triangular prism; (6) Make a paper form of a square pyramid.

Music.—(1) Why is music made an essential feature of kindergarten instruction? (2) How would you prevent children from straining their voices? (3) How would you secure a pure, sweet tone in singing? (4) Write, on the staff, three measures of music in the key of A $\frac{1}{2}$ time, using a half note in the first, a dotted note in the second, and a quarter rest in the third; (5) Write, on the staff, the major scale of B flat; (6) Sing at sight, exercise A; (7) exercise B; (8) from memory a kindergarten action song.

Plant and animal life.—(1) What peculiarities of structure are used as the basis of the classification of plants? Illustrate your answer by classifying the pink; (2) Illustrate by drawings the several parts of a flower; combine these several parts to represent the entire flower, and name the flower that you have drawn; (3) Write the outlines of a lesson on the *potato* to a class of kindergarten children; (4) Name the four great divisions into which naturalists have divided the animal kingdom, state the leading characters of each; (5) Name three different coverings of animals, and show how these coverings are adapted to the habits of the several animals to which they belong; (6) Give a conversation lesson on the *cat*, stating the distinguishing characteristics of the structure and the habits of the family to which it belongs.

Physical phenomena of nature.—(1) Write out the topics of a conversation on snow, showing the subject-matter and the purpose of the lesson; (2) Arrange the outlines of a class lesson on rocks, adapted to advanced kindergarten pupils; (3) How would you develop a lesson on running waters so as to explain their origin and their uses? (4) Write the outlines of a conversation lesson on light.

School hygiene.—(1) Give the three essentials of any scheme of artificial ventilation; (2) How can the teacher care for the eyes of the pupils? (3) How can the moral nature of the pupils be effectively aroused and strengthened by agencies at the disposal of the teacher? (4) Why do not the feelings of teacher or pupils form a good means of judging of the correct temperature of a room? What do the best authorities consider the proper temperature? (5) How can the kindergarten teacher influence her pupils in regard to their food?

Mental and moral science in their relation to education.—(1) Discuss the relative values of mental development and mental acquisition; (2) What is meant by training a faculty? Name the special senses in the order of their knowledge-giving power; state what stimuli are appropriate to each; (4) Upon what two conditions does the power to reproduce an object or event some time after it has been presented depend? (5) Show how imagination is related to the acquisition of knowledge; (6) Discuss sympathy as an element in education, its uses, how cultivated; (7) Mention some of the ways by which a child's attention is stimulated.

History of education.—(1) Write a comparison of the methods and aims of education as practised in Sparta and in Athens; (2) What was the condition of education in the Middle Ages? (3) Explain the rise of humanism and its influence upon modern education; (4) Give some account of the educational theories of Comenius; (5) Discuss briefly the educational theories set forth in Rousseau's *Emile*; (6) Give a short statement of the practical principles introduced into the school by Pestalozzi, and the bearing of these upon the subsequent development of educational methods; (7) State the leading principles of Spencer's philosophy of education.

Unfortunately we have not the data to make a comparison of the courses of the schools and classes in our table with the course of an institution giving the highly professional instruction which the Philadelphia examination papers assume that the candidate has had. Most frequently the course is of a year, and in that time it is doubtful if a student could acquire the attainments required at Philadelphia unless the process was one of refreshing or particularizing knowledge already acquired and digested.

Kindergarten instruction in normal schools.—In these schools the kindergarten has lately made its appearance. To endeavor to ascertain to what extent such instruction was being given to the intending teacher, the inquiry "Number receiving special training for kindergartens" was made. In fifteen instances a reply has been made by inserting the number in the blank space left for the purpose. In one case the answer is, "None special, but 44 receive," and in another case, "Kindergarten instruction in primary classes." As far as reported, the number receiving instruction in kindergarten methods is 841.

Summary of statistics of kindergarten training schools (Table 34).

State.	Schools.	Teachers.	Pupils.	State.	Schools.	Teachers.	Pupils.
California.....	2	4	46	Missouri.....	1	3	28
Connecticut.....	1	4	12	New York.....	13	19	162
District of Columbia.....	3	7	24	Ohio.....	2	2	32
Illinois.....	4	9	120	Oregon.....	1	3	7
Indiana.....	2	4	57	Pennsylvania.....	5	10	374
Iowa.....	1	1	8	Rhode Island.....	1	3	12
Kansas.....	1	1	10	Tennessee.....	1	1	5
Louisiana.....	1	2	8	Utah.....	1	1	30
Maryland.....	1	2	13	Wisconsin.....	4	10	36
Massachusetts.....	6	6	31				
Michigan.....	1	1	4	Total.....	55	96	962
Minnesota.....	3	3	13				

NOTES FROM VARIOUS SOURCES AS TO THE CONDITION OF NORMAL SCHOOLS AND OTHER INSTRUMENTALITIES FOR IMPROVING THE TEACHING BODY IN THEORY AND PRACTICE.

ALABAMA.

The new institution for training teachers established at Troy during the year for white pupils has fully gotten under way. Its object, says the organic act, is to educate teachers for the public schools of Alabama; its aims are as follows: (1) to give thorough and systematic instruction in the branches usually taught in common schools; (2) to add such other branches of general culture as will increase the knowledge of students and inspire them with a love of learning and a zeal for teaching; (3) to direct their observation and afford them such practice in teaching as will help them to acquire a mastery of the theory of teaching and skill in its practice; (4) to form, as far as possible, correct habits—physical, mental, and moral.

The building is of brick, and well furnished with the latest and most approved apparatus and appliances. To obtain admission, applicants must be at least fifteen years of age and have passed a creditable examination in the studies of the grammar grade. The examination is intended rather to bring out the student's intellectual capacity than to ascertain the quantity of his learning. Upon entering, the pupil signs a pledge, whereby he obligates himself to teach in the public schools of Alabama for at least two years. He (or she) can only be released from this obligation by paying the tuition fees that, if not entering into the obligation, he would have been compelled to pay. There are no dormitories connected with the school.

The courses of study are two: one of a single year, purely professional, for graduates of high schools and colleges and for teachers of more than one year's experience who are able to pass the examination for a first-grade certificate; the other, a course of three years, in which technical studies are not considered, at least specifically, until the second year. This three years' course, not considering the technical studies, is academic; Latin is required, French and German optional. Students completing the course will be granted the diploma of the school, which, by law, is a life certificate to teach in the schools of the State. Drawing is taught free of charge to intending teachers. The public school of the town affords opportunities for practice to the pupils. It is understood that two years have been added to the course, making it equal in course to a college.

The school in Greene County, for which provision was recently made by the Legislature, has not been established, by reason of the failure of the people of the county to provide the building required by the act.

At the State Normal School at Florence it is reported that more work of a professional character is being done than ever before. The principal also remarks that

"The demand for young men as teachers far exceeds the supply. * * * Some steps should be taken to induce young men to take normal training, as they are wanted in small towns and rural districts, while young ladies are wanted in city graded schools." The Alabama Normal College for girls receives \$2,000 annually from the State to pay for the tuition of normal pupils and \$500 to purchase school appliances. The teachers' training courses are two; one of two years and the other of four. The normal pupils pursue the studies of the college curriculum, receiving instruction in methods during the last year of their course. Those that have completed the two years' course receive a certificate to teach in the schools of the State, those completing the four-years' course receive the degree of normal and literary graduate. This school and the Tuskegee State Normal and Industrial School have been included in the table of public normals, inasmuch as they are both recipients of State aid, though not wholly State institutions.

Of private schools for training teachers the only event of note is the change in name of the school at Huntsville from Rust Normal to Central Alabama Normal Institute.

In his report to the trustees of the Peabody Fund Superintendent Palmer remarks: "Trained teachers are indispensable for any public school system, and I am glad to be able to report that the normal schools of the State each year are doing more and more training of teachers. The demand for normally trained teachers is increasing, causing a corresponding increase in the patronage of our normal schools, and the territory from which this patronage is drawn should be extended over the entire State."

Institutes.—It is estimated by the same authority that perhaps one thousand teachers attended the twenty-one teachers' institutes held during the year. The conductors of these institutes were all teachers experienced in the work. A full report of these meetings can not be had until the publication of the superintendent's annual report.

The appropriation from the Peabody Fund was \$3,000 for the seven normal schools, the Florence school obtaining over a third of the whole. For teachers' institutes \$1,000 were appropriated, which, with the \$500 appropriated by the State, were used in defraying the expenses of the twenty-one institutes above mentioned, one for county superintendents, eleven for white teachers, and nine for colored teachers.

Teachers' meeting.—The Alabama Educational Association was called to order by State Superintendent Palmer on the 26th of June last, at Bessemer. In his annual address, the presiding officer, after congratulating the association on its increase in numbers and its growing usefulness, remarked: "This seems to be an age of constantly increasing associations, caused, no doubt, by our rapidly multiplying population, industries, and commerce. In law, we have the State Bar Association; in physic, the Medical Association. * * * I might go on enumerating various associations, all having laudable objects in view. * * * It seems that those engaged in the different professions and pursuits of life have banded themselves together to become more proficient in their profession and to render their business more profitable. No profession is more worthy of encouragement than that of the teacher, and none more susceptible of improvement by association. By means of our association the ethics of the profession has been improved and given increased emphasis; young and timid teachers have been encouraged, others have had pointed out to them better methods of instruction and school management, which they have used with profit. * * * This association, then, should be encouraged, and its meetings more generally attended, as one of the means of increasing the available means of increasing the efficiency of those teachers who desire to improve, and of driving out of the profession those who can not or will not improve." The committee appointed on the Alabama Teachers' Home, located at Monteagle, Tenn., made the following report:

"Believing that some place of rest, social, intellectual, and religious improvement to be an important factor in the educational interests of our people, and believing that the 'Alabama Teachers' Home,' located at Monteagle, Tenn., is the best opportunity of meeting this demand: Therefore,

"*Resolved*, That we, as the Educational Association of Alabama, heartily endorse the work already done by the executive committee appointed at Monteagle.

"Second. That the president of this meeting appoint a committee of three to act with the Monteagle committee.

"Third. That this committee be authorized to devise whatever means they may deem best, the other committee agreeing thereto, for the completion of said Home."

The amount subscribed by the members of the association for the Home was \$250. The meeting adjourned on the 29th.

The Alabama Teachers' Home, above referred to, is the result of a suggestion made by Miss Julia Tutwiler, of the Alabama Normal School for Girls, four years ago. The Monteagle Sunday School Association has donated three lots to the association having the matter in charge. These are on the east side of the grounds at Monteagle, Tenn., a village delightfully situated on the Cumberland plateau. To the three lots thus ob-

tained Mr. Peebles, the secretary and treasurer of the Home, added another, making a front of two hundred feet. On this property three buildings are to be erected, one of which has just been completed, and is somewhat in the Italian villa style, so much in vogue about thirty years ago, but without the campanile. This is not a home for those so unfortunate as to have survived their usefulness, but a place of recuperation and rest, it would appear—"a place of recreation and profit to Alabama teachers."

ARKANSAS.

The branch normal college of the Arkansas Industrial University reports a new dormitory building now being erected at an expense of \$5,000. In the absence of the State report the only items that the Office has been able to obtain are from the report of the agent of the Peabody Fund, from which it appears that \$2,000 were paid for the support of ten scholars at the Peabody Normal College, at Nashville, Tenn., and \$1,500 for institutes in the State.

CALIFORNIA.

At the State Normal School at Los Angeles a year of graduate work has been added. This is designed to fit graduates for the requirements of grammar school teaching, and it is hoped that a sufficient number of those who have already taken the three years' course will form a class of at least ten for 1888-89. The professional studies of this additional course are psychology in the first term, philosophy of education in the second, methods in the third. The library of this school is large, and its section of "philosophy and education" consists of one hundred and ten volumes dealing practically or theoretically with the profession of teaching. "Some seven or eight of our students," says the principal, "have, after graduating, entered the State University at Berkeley to prepare for higher teaching."

At the school at San José a graduate course of a year has also been provided. Another important change made is the division of the yearly course into three terms; formerly there were but two.

The building for the Chico school has not been completed; the school will be opened in the fall of 1889.

The normal department of the Girls' High School of San Francisco is intended mainly to prepare primary teachers for the city schools; the number of pupils is limited to sixty for the coming year, including the graduates of the Girls' High School who obtained a percentage of 75 or over in the final examination.

The laws relating to the State normal schools, as amended, to take effect July 1, 1887, briefly referred to in the Report for 1886-87, are as follows:

The normal schools at San José and at Los Angeles, and any normal school established after the 1st day of January, 1887, by the State, shall be known as State normal schools, and shall each have a board of trustees, constituted as follows: The Governor and State Superintendent of Public Instruction shall be members of each board, and there shall be five members, whose term of office shall be five years, who shall be appointed by the Governor: *Provided*, That the trustees in the State Normal School in office June 30, 1887, shall hold office until the end of the terms for which they were appointed: *Provided*, That no appointment made after the approval of this act shall be for a term of more than five years, and the trustees in office when this act takes effect shall become members of the board of trustees of the normal school located nearest to their residences, and the members of any board of trustees, when first appointed and organized, shall classify themselves so that the term of one trustee shall expire annually.

The State normal schools have for their objects the education of teachers for the public schools of this State.

The State normal schools shall be under the management and control of boards of trustees.

The powers and duties of each board of trustees are as follows:

To elect a secretary, who shall receive such salary, not to exceed \$150 per annum, as may be allowed by the board. To prescribe rules for their own government, and for the government of the school. To prescribe rules for the reports of officers and teachers of the school, and for visiting other schools and institutes. To provide for the purchase of school apparatus, furniture, stationery, and text-books for the use of the pupils. To establish and maintain training or model schools, and require the pupils of the normal school to teach and instruct classes therein. To elect a principal and other necessary teachers, fix their salaries, and prescribe their duties. To issue diplomas of graduation upon the recommendation of the faculty of the school. To control and expend all moneys appropriated for the support and maintenance of the school, and all money received from tuition or from donations. (In no event shall any moneys appropriated for

the support of the school, or received from tuition or donations, be paid or used for compensation or travelling expenses of the trustees of the school, except when attending the joint meetings provided for by section 1492 of the political code of the State of California, and each trustee attending such meetings shall receive the same mileage as is allowed by law to members of the Legislature, for not more than two meetings in each school year.) To cause a record of all their proceedings to be kept, which shall be open to public inspection at the school. To keep open to public inspection an account of receipts and expenditures. To annually report to the Governor a statement of all their transactions, and of all matters pertaining to the school. To transmit with such report a copy of the principal teacher's annual report. To revoke any diploma by them granted, on receiving satisfactory evidence that the holder thereof is addicted to drunkenness, is guilty of gross immorality, or is reputedly dishonest in his dealings: *Provided*, That such person shall have at least thirty days' previous notice of such contemplated action, and shall, if he asks it, be heard in his own defence.

Each board of trustees must hold two regular meetings in each year, and may hold special meetings at the call of the secretary, when directed by the chairman. The time and place of regular meetings must be fixed by the by-laws of the board. The secretary must give written notice of the time and place of special meetings to each member of the board. Joint meetings of the boards of trustees of the State normal schools shall be held at least once in each school year, alternately, at the different State normal schools. The first meeting shall be held at San José, and thereafter at the other normal schools in the order of their organization. At such meetings the trustees shall have the power, and it shall be their duty: To prescribe a uniform series of text-books for use in the State normal schools (the State series of text-books shall be used, when published, in the grades and classes for which they are adapted); and to prescribe a uniform course of study, and time, and standard for graduation from the State normal schools.

Every person admitted as a pupil to the normal school course must be of good moral character, of sixteen years of age, or of that class of persons who, if of proper age, would be admitted in the public schools of this State without restriction.

Teachers holding State certificates of the first or second grades may be admitted from the State at large. Persons resident of another State may be admitted upon letters of recommendation from the Governor, or superintendent of schools thereof. Every person making application for admission as a pupil to the normal school must, at the time of making such application, file with the principal of the school a declaration that he enters the school to fit himself for teaching, and that it is his intention to engage in teaching in the public schools of this State, or in the State or Territory where the applicant resides.

The principal of each State normal school must make a detailed annual report to the board of trustees, with a catalogue of the pupils, and such other particulars as the board may require or he may think useful. He must also attend county institutes, and lecture before them on subjects relating to public schools and the profession of teaching.

The board of trustees of each State normal school, upon the recommendation of the faculty, may issue to those pupils who worthily complete the full course of study and training prescribed, diplomas of graduation. To each pupil receiving this diploma, and thereafter teaching successfully in the public schools of this State for three years, and to each pupil who worthily completes the post-graduate course, the State board of education shall grant an educational diploma.

The board of trustees, or such trustees as attend the joint meetings, shall have power to appoint a secretary, who shall receive such compensation, not to exceed twenty dollars for each joint meeting, as the trustees present at the meeting may order paid. The secretary shall keep a full record of all the proceedings of the joint meetings of the trustees, and shall notify the secretary of each board of trustees of any changes made in the course of study or the text-books to be adopted in the State normal schools.

The superintendent of public instruction must visit the school from time to time, inquire into its condition and management, enforce the rules and regulations made by the board, require such reports as he deems proper from the teachers of the school, and exercise a general supervision over the same.

Each order upon the Comptroller of State by the board of trustees of a State normal school must be signed by the president of the board, and countersigned by the secretary. Upon presentation of the order aforesaid, signed and countersigned as aforesaid, the Comptroller of State must draw his warrant upon the State treasurer in favor of the board of trustees for any moneys, or any part thereof, appropriated and set apart for the support of the normal school, and the treasurer must pay such warrants on presentation.

Teachers' institutes.—The law provides for county institutes in all counties having twenty districts or more, for not less than three or more than five days. The State superintendent thinks these limits should be increased to five and ten days, respectively. He calls for the enforcement of the law requiring the teachers to attend and thinks they should be notified of the part they are expected to take in advance that they may have

time to prepare. Twenty per cent. of the teachers in the public schools of the State are graduates from normal schools, and for the other four-fifths this institute instruction is valuable. The county superintendents and county boards of education in nearly all counties consider it as unprofessional conduct on the part of teachers to absent themselves from the institutes, and in a few cases have even gone so far as to revoke certificates for non-attendance. In 1888, 632 more teachers attended institutes than in 1887. The expense for institutes of the forty counties holding them was \$4,456.

Prof. C. H. McGrew, occupying the chair of educational psychology, science, and art of teaching at the University of the Pacific, observes in a comprehensive article on "A Normal Institute System for California:" "During the last two years as an instructor and conductor in some sixteen different institutes, and an observer of the work in many others, I have had an excellent chance to see the work and judge of its efficiency. I shall speak frankly of some of the most obvious defects and abuses of the (county) system. I would prefer to speak of its merits.

"(1) The average time, about three days, is entirely too short to do much good. If the whole time were given to it, not even one subject could be taken up thoroughly, much less from six to ten. Think of considering a whole science in its professional aspects in forty minutes! The institute scarcely gets in readiness to work when it has to adjourn. So the session is little more than a formal gathering.

"(2) The institute is made, four times out of five, a parliamentary body. It should be a professional school, with the county superintendent as manager. * * * I can not see the necessity of electing all the resident ministers and physicians vice-presidents. * * * Much valuable time is often wasted in this way.

"(3) The crude, unpractical, and unprofessional methods of work adopted. After a programme has been prepared for the session it is not an uncommon thing to see all sorts of motions entertained and discussed, proposing to do something entirely outside of the work and aims of a teacher's institute."

Annual joint convention of the boards of trustees of normal schools.—This meeting was held at Los Angeles, April 9, 1888, each of the three schools being represented. The report of the special committee to which had been referred the matter of preparing a uniform course of study and a uniform series of text-books for use in the normal schools proposed that each school year be divided into three terms, the first to commence the first Tuesday in September and to continue sixteen weeks, to be followed by a vacation of two weeks, and two other terms, to continue for twelve weeks each. After some discussion and dissent the report was adopted. The changes in the courses of the normal schools above noted seem to be pursuant to this action.

Teachers' associations.—The California Teachers' Association began its twenty-first annual session at Berkeley, December 27, 1887, and continued in session four days. On the second day of the session, the first being taken up with organization, the association separated into its four sections—high school, grammar school, ungraded, and primary. With two exceptions the Office has no information as to the papers except their several titles,¹ the exceptions are Professor McGrew's paper on "A Normal Institute System for California," quoted in part above, and Professor Le Conte's paper on "Sense Training and Hand Training in the Schools,"¹ both papers, by request of the members of the association, having been published in the Pacific Education Journal.

"As a nation," said Professor McGrew, "we are free to develop our institutions according to our inclinations, conceptions, and circumstances, * * * To meet our wealth of mind and character and diversified wants, schools representing almost every interest and aim have sprung into existence in our most progressive States. The most important of these to our nation and civilization are the normal and professional training schools, fitting teachers to teach the children of our public schools. This is an age of specialties. * * * Teachers, above all other skilled and professional persons, must be fitted and trained for the profession of all professions—teaching. To create as well as to supply a demand for better prepared and specially trained teachers, our normal schools have sprung into existence within the last forty years. Every State in the Union has one or more such schools. These schools have done something, but not all they could and should have done. I must kindly say, yet frankly, that many of them are normal schools only in name, for in their work and results they do not differ materially from the high school or academy. They have developed but few of the normal or professional features, yet they have done much good in giving us better academically prepared teachers with a sprinkling of professional training. The graduates may be divided into two classes,—those who have tendencies and aspirations for more professional knowledge and skill, and those who have a self-sufficiency and conceit almost unbearable. * * *

"Chairs in the science and art of education are now being established in our better colleges and universities throughout the country. * * * In my judgment our State university could benefit the public schools so much and secure a hold on them and the

¹ See Chapter XV.

people which are to support it in no other way so well as to establish such a chair and fill it with an able and practical teacher."

"California," continues the professor, "needs a normal institute system. * * * We need a four weeks' normal institute system, making the county and county superintendency prominent factors, with the law so constructed that two or more sparsely populated counties may unite to hold a union institute. * * * Our normal institutes should be short-term professional training schools, held during the summer and winter vacations. A professional course of study of three or four years should be prepared by the State superintendent or State board, and should be general, definite, and so flexible that it can be adjusted to the varying conditions and needs in the different counties, and at the same time secure a sufficient degree of uniformity. * * * It should provide for a completion of the course by teachers, and some legal recognition of such work by authorities, thus stimulating attendance and forming a class of teachers for our common schools. Model classes in kindergarten and primary teaching, and other grades, should be maintained free to the children in the town where the institute is held, thus furnishing the best illustrations of the new methods."

The professor would not compel the teachers to pay for these institutes, as in some States, nor have attendance made compulsory, but would offer as an inducement at least two weeks of school time to attend. Examining the pecuniary side of the question, Mr. McGrew observes: "Let us make a very economical estimate. Take \$500, the amount allowed for the smallest school in the country. This will enable the county superintendent * * * to hold a good four weeks' normal institute. A good conductor ought to be secured for the session for \$250 or \$300, and a good assistant for \$150, thus allowing from \$50 to \$100 for incidentals."

Speaking of the advantages to follow from a normal institute system, the speaker concluded thus: "Many of our teachers are laboring under educational and social disadvantages little felt in many parts of the East. I know from observation what many have to endure from isolating social starvation and lack of interest and sympathy on the part of others. Nothing will ever succeed in rendering the simple profession of the district teacher as attractive as it is useful. Society can not make a sufficient return to those who are earnestly devoted to this work. There is no fortune to be won, there is scarcely a reputation to be acquired in discharging their laborious duties. Destined to see their lives pass away in monotonous toil, often to encounter the injustice and ingratitude of ignorance and prejudice, they must become disheartened and succumb if they do not draw their strength and courage from other sources than a pecuniary reward and personal ambition. They must be constantly sustained and animated by a profound sense of the moral and social importance of their calling; the noble thought and feeling that they are quietly contributing to the intellectual and moral worth of the State and nation must be their highest reward. * * * Such teachers need our help. They need guidance, light, inspection, enthusiasm, and sympathy. Let California establish a normal institute system for this worthy purpose, and in five years we will have the finest equipped army of teachers in the Union."

COLORADO.

In the March, 1888, number of the Colorado School Journal the people of Arvada, Jefferson County, are said to be making active exertions to have the State normal school located at that place. Already the citizens "have subscribed about \$1,400 in cash and over 100 acres in land," and the county was to be asked to subscribe \$5,000. "It is proposed to get everything in shape * * * and go before the next Legislature with strong backing, and ask that body to pass a bill creating the school, and an appropriation therefor."

Institutes.—During August, 1887, the first institute district (the State is divided into six) held its meeting at Fort Collins for two weeks. This was the first district to profit by the new provision of the school law whereby a union of individual, county, and State funds was made possible. A number of meetings were announced for July and August, 1888.

Teachers' associations.—The State association held its thirteenth annual session on December 27, 1887, with an attendance much larger than usual. The first day of the session was devoted to addresses on manual training, and the president's annual address. In his remarks Mr. Remington, the president of the association, said that very few boards of trustees have any settled or well-defined policy. As a rule they represent not their constituents, the people, but those whom they themselves have constituted the teachers. "The teacher," Mr. Remington continues, "is a positive force. He, as an individual, knows what he wants, how he desires to work; he makes plans. The people are passive. They want good schools and are willing to pay for them, but as to what constitutes a

good school, or even upon what principles its foundation should rest, nothing is fixed, nothing is settled."

On the third day of the meeting the county superintendents' section was held, and a series of resolutions adopted by the association, of which the first is as follows:

"We endorse the central idea of the president's address, which emphasizes the need of a more intelligent appreciation of the functions and purposes of the public school on the part of the general public, and which urges teachers to strive to come into a closer and more sympathetic relation with parents."

The Office has record of meetings of the teachers of Boulder, Custer, Jefferson, Logan, and Mesa Counties.

CONNECTICUT.

The Connecticut Normal and Training School has completed the thirty-sixth year of its existence. "Its history," says the State superintendent, "has been most honorable, and what it has accomplished for its students and through them for the children and schools of this State has been in the past recognized and appreciated. Never were the demands for its graduates so urgent and numerous, and never was the prospect for usefulness so bright. * * * The graduates of the year 1887, numbering sixty-two, constituted the largest class that has ever been sent out. All of them are teaching, and thus in one year the school has supplied about one-sixth of all the beginners in the State. * * *

"As has been stated, there is a constantly increasing demand for teachers from this school and they teach with satisfaction to parents as well as with delight to children. This is an important gain because it indicates that the training has not put them out of tune with the sentiment of intelligent people. It might be expected that persons especially trained for a particular work would have narrow notions and perhaps a period of overweening conceit and self-sufficiency. If this is true, it does not come to our knowledge, and if it exists probably soon gives way, and the real effect of their instruction is apparent."

The gymnasium has been finished and an instructor in physical training employed. The course so far has been eminently successful.

The city superintendent of New Haven reports that, to provide sufficient practice for the pupils of the Welch School during the second half of the year of training, schools in two other buildings will be used hereafter for this purpose. The superintendent suggests that it would be better if one teacher at a time were assigned to give instruction, and that the regular teacher of that room should be competent to set an example of good teaching and to aid and advise the novice. The Cedar Street School is, in the language of the city superintendent, "the headquarters for substitute teachers;" the pupils, all being graduates of the Welch School, are sent out to fill temporary vacancies, working under the direction of the principal. The lack of regular teachers, a want from which this school has been suffering, has at last been overcome.

Institutes.—The number of teachers' meetings held during the year was twenty-one, with an attendance of forty-three. A summer school for teachers was to be opened at Niantic the first week in July and continue two weeks.

Teachers' associations.—The forty-first annual meeting of the Connecticut State Teachers' Association was held at Hartford, October 13-15. The Eastern Connecticut Teachers' Association met at Willimantic, November 11, 1887.

DAKOTA.

From the report for 1886-88 of the Territorial board of education, we obtain the following information:

The Territorial board of education has no control over the normal schools of the Territory except as to the course of study they are to pursue; but they think that in view of their position a few remarks on them will not be indicative of a desire to overstep the sphere of their duty. It gives them pleasure to state that radical changes have been made in the general administration of these schools, especially at the Madison school. These changes have been in the direction of professional training and of a gradual widening of Territorial influence, in contradistinction to the local character of officers and teachers and attendance in the past. Though not all that they should be, these schools challenge comparison with the best schools of the North-west. A member of their board, also a member of the board of visitors to the school of Madison, speaks in high terms of the instruction given at that school and of its conditions. The school at Spearfish has completed the new building, and most constantly gratifying reports are received from it. The need of an additional school for northern Dakota is pointed out and urged as necessary to complete the system.

In our last Report we spoke of the provisions for normal instruction in private schools and colleges. These departments are conducted under the following regulations:

Each school so designated shall adopt the course of study for its normal department that is prescribed by the Territorial board of education, and the principal of that department and all its teachers be approved by the board. Nor shall any free normal class be taught by a person not a graduate of a college or normal school in good standing.

The board reserves the right to prescribe the qualifications for admission to the free normal classes, and the questions for any or all examinations, and may at any time hold special ones.

No free normal class shall have more than twenty-five or contain fewer than ten pupils. All pupils admitted to such classes shall be accorded the same privileges as to lectures, libraries, dormitories, etc., as are enjoyed by other classes of the institution.

No tuition is to be charged other than that paid by the Territory, nor will the Territory allow a charge for a pupil attending for a shorter period than ten weeks.

Each school accepting this appointment binds itself to designate one member of its faculty as principal of the normal department, whose first and most important duty is to teach the classes of the department and supervise his assistants, if any. He may teach other classes of the institution, "if his time permits," and pupils of other classes pursuing the same studies as those of the normal class may be admitted therein. The principal must keep a record of attendance, standing, etc., and make an annual report to the board of education.

Should, in the opinion of the board, the school not do satisfactory work or violate the agreement, the board may withdraw the pupils at the expiration of a notice served three months before.

The faculty may require the normal pupils to conform to the rules of the institution, and may advertise the special department in any way they please to increase its attendance.

The board of education reserves the privilege of granting diplomas to such pupils as complete the normal class course of study.

The conditions of admission are (1) that the pupil be seventeen years of age, of good character, and declare it is his purpose to fit himself for teaching; (2) that the candidate pass an examination in the studies of the public school if not a graduate thereof or the holder of a certificate to teach in any of the counties of Dakota.

The statistics of these classes are given here rather than in connection with the main body, inasmuch as the report arrived too late to incorporate them there. The table of the Territorial report is reproduced.

Record of Attendance, with Amount paid each Normal Department.

Name of Institution.	No. of Pupils.	No. of Weeks of Attendance.	Amount Due.	Total Amount Due for Term.	Total Amount Paid the Institution During Year.	Amount not Allowed.
Groton College:						
Winter term.....	8	14	\$112.00	\$220.00	\$220.00
Winter term.....	3	13	39.00			
Winter term.....	4	12	48.00			
Winter term.....	1	11	11.00			
Winter term.....	1	10	10.00			
Jamestown College:						
Fall term.....	20	12	240.00	250.00	660.00
Fall term.....	1	10	10.00			
Winter term.....	25	12	300.00			
Spring term.....	10	11	110.00			
Mitchell University:						
Fall term.....	17	13	221.00	273.00	820.00
Fall term.....	2	11	22.00			
Fall term.....	3	10	30.00			
Winter term.....	9	13	117.00			
Winter term.....	12	10	120.00	285.00		
Winter term.....	4	12	48.00			
Spring term.....	20	12	240.00			
Spring term.....	2	11	22.00			
Milnor Normal School:						
Winter term.....	15	17	235.00	401.00	580.00	\$9.00
Winter term.....	6	16	96.00			
Winter term.....	3	13	39.00			
Winter term.....	1	11	11.00			
Spring term.....	10	10	110.00	180.00		
Spring term.....	7	10	70.00			

Record of Attendance, with Amount paid each Normal Department—Continued.

Name of Institution.	No. of Pupils.	No. of Weeks of Attendance.	Amount Due.	Total Amount Due for Term.	Total Amount Paid the Institution During Year.	Amount not Allowed.		
Pierre College:								
Fall term.....	10	14	\$140.00	\$152.00	\$394.22	\$2.00		
Fall term.....	1	12	12.00					
Winter term.....	10	12	120.00	130.80				
Winter term.....	1	11	10.80					
Spring term.....	10	10	100.00	111.42				
Spring term.....	1	11	11.42					
Redfield College:								
Fall term.....	7	14	98.00	134.00	545.00	14.00		
Fall term.....	1	13	13.00					
Fall term.....	1	12	12.00					
Fall term.....	1	11	11.00					
Winter term.....	12	13	156.00	240.00				
Winter term.....	1	20	20.00					
Winter term.....	1	19	19.00					
Winter term.....	1	18	18.00					
Winter term.....	1	17	17.00	171.00				
Winter term.....	1	10	10.00					
Spring term.....	10	11	121.00					
Spring term.....	5	10	50.00					
Scotland Academy:								
Fall term.....	10	12	120.00	141.00	514.00	33.00		
Fall term.....	1	11	11.00					
Fall term.....	1	10	10.00					
Winter term.....	14	11	154.00					
Winter term.....	4	10	40.00	245.00				
Winter term.....	1	17	17.00					
Winter term.....	1	19	19.00					
Winter term.....	1	15	15.00	128.00				
Spring term.....	5	11	55.00					
Spring term.....	6	10	60.00					
Spring term.....	1	13	13.00					
Yankton College:								
Winter term.....	9	11	99.00	109.00	207.00	12.00		
Winter term.....	1	10	10.00					
Spring term.....	10	9	90.00	98.00				
Spring term.....	1	8	8.00					
Total					3,940.22			

The Office has information that in September, 1889, the Norwegian Evangelical Lutheran Synod of America will open a school under the name of the "Lutheran Normal School" at Sioux Falls, for the specific purpose of training teachers of either sex for the public schools and for the parochial schools of the synod.

Institutes.—The department of public instruction intends to arrange two courses of institutes a year, deeming that the experience of the Territory and the States show that an institute of one week in duration is better than one of two weeks. The courses are to occur during the fall (September to December) and the spring (March to June), respectively. In every county the department will appoint a conductor and an assistant if the county funds will admit of it, and county superintendents are requested not to employ more than two instructors. Twenty-five dollars are to be appropriated from the Territorial treasury for each week the institute continues.

The objects of the institute are to help the majority of teachers, especially the country teacher. The institute "is not a school," and academic instruction is not of the first importance. The teacher is expected to have acquired the matter; it is the method that he requires. In brief, the object is (1) to increase efficiency by giving (a) a distinct idea of the ends of education, (b) elementary knowledge of education as a science of teaching, (c) instruction in methods; (2) to secure greater uniformity (a) by discussion, (b) by professional co-operation; and (3) to correct prevailing errors.

In a later circular (1888) the department thanks the county superintendents and teachers for their support in carrying out its plan, and conductors and superintendents are advised to confine their work mainly to reading, arithmetic, language, physiology, and methods of teaching. The object of each lesson in drawing, which is also advised, is, first, to show its value; and, second, as the only available means at present to train eye and mind; "it will be the first step towards manual training."

The number of fall institutes was eighty-six, including twenty either not having an institute or not reporting. In the counties reporting there were 3,781 teachers, of whom 2,832 (not including 43 of Turner County, which did not report number of teachers) attended an institute; about 75 per cent. The meetings were also attended by 297 school officers.

Eighty-five counties were to hold institutes during the spring of 1888, of whom twenty-seven, if holding one, did not report. In the counties reporting there were 3,494 teachers, of whom 2,621 attended; about 75 per cent. At these meetings 276 school officers were present.

The cost of the fall course was \$4,874; of the spring course, \$4,480, a per capita in each case of about \$1.70.

Teachers' meeting.—The Educational Association of South Dakota met at Huron, December 21 to 23, 1887-88. Of this meeting Superintendent Patterson, of Huron, says that, though small, it was the best in results ever held in Dakota. High school matters, as well as professional, appear largely to have occupied the attention of the meeting. The constitution of the association was amended in such a way to put the body under the direction of a council of twenty-one teachers.

FLORIDA.

The course of the normal department of the recently established school at De Funiak Springs is of two years, each of two terms. No foreign language is taught, and nothing of algebra or geometry until the second year. Drawing, pedagogy, and methods of teaching appear throughout the entire course. "Our basis of classification is arithmetic," says the principal, "and the advancement of the student in this branch will be carefully considered in the entrance examination. We therefore deem it well to state here specifically that the applicant should possess a good practical knowledge of arithmetic through the principles of percentage, and the application of these principles to simple interest."

Teachers who desire to take the course of the school may complete it by attending three months each year, if they can not remain longer, and on completing the course thus taken by sections a diploma will be given to them of the same character as that given to graduates that have followed the course continuously.

The work at the State Normal School for colored is reported as wholly preparatory. *Institutes* were held in thirteen counties, during a period of sixteen weeks. At each meeting a number of teachers from other counties were present. The work was carried on under the direction of a board of inspectors of five members.

The principal instructor in his report remarks of their work: "While the attendance as a whole was not what we had hoped it would be, yet viewed in connection with the many extenuating circumstances we have reason to feel satisfied with it. * * * We were pleased to notice the increased favor with which institute work is now received by the teachers of the State. * * * In addition to this sentiment on the part of the teachers we find that the citizens generally are disposed to foster our work and to lend us the encouragement of their presence. This latter fact can not but result in good, for the trustees and patrons by attending these institutes will better understand what a teacher's qualifications should be, and in this way it will come that only true merit will be recognized. As to the usefulness of these institutes in our school system there can be no question. In the first place, there are many persons engaged in school work who have received no special preparation for it, and whose means are too limited to permit them to attend a training school. These teachers receive in the institutes suggestions on the most approved methods of instruction and are thus enabled to incorporate them in their work. In the second place, by this means a uniformity in school-room work is secured throughout the State. * * * And lastly, but most important perhaps, these meetings attract attention to the schools and thereby stimulate that interest in education which is so much to be desired, and which could not be accomplished so well in any other way." The cost of the institutes was \$1,588.

GEORGIA.

"There are, strictly speaking," says Superintendent Slaton, of Atlanta, "no normal schools in Atlanta or the State of Georgia. We have a meeting of the teachers of our city schools every week to discuss methods, etc., and this is known as a 'teacher's normal class.'" In his last report the same gentleman speaks of the meetings thus: "A general meeting of all teachers is held the first Saturday in each month. At this meeting institute work is done and the teachers are paid their salaries for the month previous. Essays on educational subjects are read by teachers previously appointed from the class; lectures are delivered by distinguished men not connected with the schools; and ques-

tions pertaining to methods of teaching and discipline are freely discussed. The three remaining Saturdays are occupied respectively by teachers of the high schools, of the grammar grades, and of the primary grades. In these meetings regular lessons taught in the respective departments are recited, and methods of teaching them freely discussed. Too much stress can not be given to the importance of these normal class meetings. The best teachers are most punctual in attendance on them, and it is an evidence of weakness for the teacher to dislike or shun them. The meetings are held in the high school building from 9 to 11 o'clock on Saturday morning."

In his seventh annual report the superintendent of Americus, Ga., speaks of the weekly meetings of the teachers of that city, under his direction, the white teachers meeting one week, the colored the next. "The first year of my superintendency," says the superintendent, "I explained and illustrated methods of teaching, having reference chiefly to the work of the primary departments. The second year the teachers discussed English grammar in all its aspects. This last year arithmetic was studied and discussed theoretically as well as practically. Lessons are assigned to the teachers to prepare at home, and these lessons are rehearsed by them before the superintendent, in which he makes suggestions, or comments on defects in teaching or discipline which he may have noticed during the interval of two weeks preceding the meeting."

At Augusta the normal classes for white and colored teachers have met regularly, as provided by the regulations. The superintendent makes the lectures practical and beneficial. During the year the class was engaged with language teaching and school hygiene. Not only was the attendance of the public school teachers regular and prompt, but a number of teachers in the private schools of the city joined the classes, and several who were desirous of qualifying themselves for positions in the public schools.

At Columbus each teacher is required in turn to prepare an essay on some subject connected with school work, the subject being selected two weeks in advance and the class discussing the paper. Speaking of these meetings during the year, the superintendent remarks: "I think the teachers will sustain me when I say these weekly exercises were productive of great good."

Institutes.—The State superintendent reports a State institute at Salt Springs, at which the attendance was about one hundred. In addition to this a series of institutes for colored teachers was held in an important part of the colored belt of the State.

ILLINOIS.

The city superintendent of Aurora has general charge of the normal training class of that city. He is aided by the principals and teachers in an endeavor to give the members the best practical course of training for the profession of teaching that can be given within the limit of one school year. Three distinct lines of work are followed: (1) A course of study including branches taught in the schools and also methods of instruction or theory of teaching; (2) a course of reading under the direction of the superintendent; (3) practical work in the school-room a portion of each day in the different grades, under the direct supervision of experienced teachers. To accomplish the first of these the class spends an hour daily with the superintendent, from 9.30 to 10.30 A. M. The results of the course of reading are shown by an essay each month, read to the members of the class, by whom it is discussed and kindly criticised. To obtain experience—the third line of work—members of the class are assigned to different rooms, where they have opportunity to observe good models of instruction, to act as assistants in supervising the silent work of pupils and in correcting papers, and to put theory into practice by teaching classes of boys and girls. The members of the class are also called upon to act as substitutes, and are expected to attend the teachers' meetings, of which there are two each week, one general and the other a special meeting of primary teachers to consider primary work. The course of study covers the studies of the common schools. The course of reading is on pedagogy, theory and practice of teaching, etc. It is assumed that those who enter the class have already attained sufficient proficiency to obtain a second-grade certificate.

Speaking of "our supply of teachers," the city superintendent of Belleville remarks: "Not only natural aptitude for teaching, but also extensive scholarship are necessary equipments for the teacher who would be successful in his calling. * * * Some of the young ladies who graduated from our own schools have succeeded well as teachers, yet * * * it is very desirable that after graduating they should acquire greater maturity of judgment, and that they should pursue their studies for several years at some State normal school. * * * Young ladies who have thus prepared themselves for their work should be elected in preference to those who have neglected this preparation."

At Quincy the teachers convened once in each month during the year. At these meetings papers were read and discussed on methods, order, etc., classes being in attendance

to illustrate methods of instruction. "The meetings," says the superintendent, "were generally full of interest and useful to the teachers."

Institutes.—It is believed that an institute is held in each county of the State annually, usually during July or August, and lasting, on the average, about ten or fifteen days. Thus a list of one hundred and one county institutes, to be held during the summer of 1888, is published in the Illinois School Journal for June, 1888. The conferences held by the State superintendent from May 4 to 22 were attended by about eighty county superintendents. At these meetings, held at various places, the syllabus for institutes received considerable attention. This syllabus was prepared by the State superintendent and a committee of the State Association of County Superintendents. The heavy orders for it, ranging from one hundred to four hundred, would seem to indicate a general desire to use it. It is more particularly referred to, page 383.

Teachers' meetings.—The Southern Illinois Teachers' Association convened at Chester, August 23, 1887. Among the features of the meeting was the public graduating exercises of about sixty persons who had completed the work of the Reading Circle. Resolutions were adopted urging teachers to join the Reading Circle, that the county superintendency be divorced from politics, and that the township be the geographical unit of the school system.

The thirty-fourth annual meeting of the State Teachers' Association was called to order December 28, 1887. The committee appointed to report upon the president's annual address recommended the following points as worthy of special consideration: As the object of the public schools is to make honest, intelligent, and upright citizens, the State has the right to demand this, and teachers should be alive to all improvements in their profession that will foster it; the county superintendency should be open only to those who have attained to "eminent success in the teaching profession," and the office should be removed as far as possible from politics; the course in country schools should be uniform; the teacher's tenure of office should be for three years; school districts should have the same boundaries as the township; and finally, that district and normal institutes should be held during the summer vacation, and that they have a special department devoted to work that will aid the teachers in the country schools. A department of higher education was established, the work of the State Reading Circle endorsed, and all efforts to teach the correct through incorrect, syntax through false syntax disapproved. The association made quite a point of the last. The language used is "that no false syntax, either written or spoken, should be allowed to exert its influence on eye or ear." The meeting lasted two days.

The association of county superintendents held its annual meeting also on the 28th of December. In the morning session a discussion of the new institute law showed that different views were held as to its value. In the afternoon session the institute question was again up, under the caption, "State Organization of Institute Work," the essayist insisting that the county superintendents should conduct his institute. In another paper a uniform course of study for institutes was advocated, and those who attended them divided into two classes—those of large experience and good scholarship, whose work in the institute should be largely professional, and those of feeble scholarship and little experience, who should be trained in methods and be subject to regular school-room discipline both as to order and study.

It was recommended by the association: That the district conferences of State superintendent with county superintendents be continued; that no one be employed as conductor or instructor in institutes who does not present documentary evidence of his approval as such conductor or instructor by the State superintendent, and that there should be an immediate revision of the syllabus of instruction prepared some time ago for the guidance in the work of county institutes. The session was closed with "the most important question that could command their attention," A Better Organization of the Educational Forces in the Rural Schools. About one-half of the county superintendents were in attendance. The editor of the Illinois School Journal, though commenting rather caustically on the proceedings of the association at this meeting, acknowledges that "the action taken looking to the improvement of the county institute is alone worth the time and expense of the meeting."

The Central Illinois Teachers' Association held its fourth annual meeting at Galesburg, March 16 and 17, 1888. The spring meeting of the Northern Illinois Teachers' Association, held at Sterling, April 27 and 28, 1888, was well attended; the association appointed a committee to investigate and to report upon the teaching of English in secondary schools. This committee has sent out a blank entitled, "Report on the Study of English in the High School," to about three hundred schools, asking that it be filled and returned.

Besides these associations many others exist in this State; county associations of teachers abound, and there is an association of State principals, and finally a school-masters', and, established within the last few months, a school-mistresses' club. The

purpose of the schoolmasters' club is the discussion and advancement of education in the State of Illinois. The methods of investigation will be informal. "There will be no display of oratory nor of rhetoric, and woe will betide the man who undertakes it. * * * The club is organized for the discovery of truth. * * * It is in no sense a 'mutual admiration society,' but proposes to sift every deliverance to the bottom." Superintendent Butler, of Beardstown, who is favorably disposed towards manual training in the school (see his report, Chapter XV) was the target for questions at the second meeting, held at Peoria, April 14, 1888, and he acquitted himself well. "A good beginning was made towards a scientific investigation of this problem."

The first general meeting of the schoolmistresses' club was held at Bloomington on May 11, 1888, with an attendance of about fifty. The aims of the club were set forth, and at the evening session it was determined to augment the educational powers of the State by establishing a woman's state teachers' association. The call for the organization of the club was based on: (1) The necessity for increased interest in profession work among women; (2) the advantage of interchanging thought and experience among teachers in the lower grades; (3) the desirability of a more direct communication between the rank and file and the State superintendency.

INDIANA.

On the 9th of April, 1888, the State Normal School building and its entire contents were destroyed by fire. The loss from this disaster was \$225,000. About \$5,000 has been expended since for furniture, books, etc., and a new building will probably be ready for use in September, 1889. The city of Terre Haute has recognized its obligations under the law and the contract with the State to bear one-half the expense of repairing the structure, the city council appropriating \$25,000 to aid the work. Additional appropriations will be made as it advances, and it is probable that in a few months the site of the former building will be occupied by a new one in nowise less perfectly adapted to the growing needs of the institution. Until that time the Normal School is carried on in the quarters now occupied in the city high school building.

The superintendent of the Warsaw schools has a class in pedagogy, which includes five more than his full corps of teachers; nineteen in all. A teachers' reading-room has been provided, and an appropriate library is contemplated.

Teachers' Associations.—The thirty-fourth annual meeting of the State Teachers' Association was held at Indianapolis, December 28, 1887. The retiring president, in the course of his remarks, said: "Some of our best school laws have been suggested by this association. The county superintendency, the township institute, the Indiana Reading Circle, have been suggested by the association. The spirit of the profession has been uplifted by it more than any other agency I can think of. The younger members will find it in a condition of active service, and we hope they will take hold and help us along with it, and make it more and more useful as the years go by."

In his address on "Needed Changes in the School Economy of Indiana," Professor Woodburn, of Indiana University, spoke of the demand for the re-establishment of the old township libraries by reason of the activity of the Indiana Reading Circle. Since the act of 1867 the libraries have fallen into disuse and their books scattered. Provision should be made for collecting these volumes and the law establishing libraries re-enacted. Text-books should not only be uniform but free. "The free text-book system has passed the experimental stage and is now an established fact." The office of teacher and of county superintendent should not be political. The association adopted a series of resolutions calling for the re-establishment of the township libraries and a small annual tax to support them. A standing committee on "school legislation" was appointed, for the purpose of annually presenting to the Legislature matters of educational importance.

Mr. Alderson, in his article on "Educational Psychology," would divide the educators of the day into three classes—those having no adequate comprehension of their profession; those who pretend to be informed in psychology; and those who think that psychology has no connection with education. "The teacher should follow the example set by scientists, and without attempting to grasp the unknowable, push into what lies immediately before him." "The constant struggle in education," he continued, "is to help the child make the ideas in his own mind real to others. * * * At the very basis of all subjects of study lie the principles of association of ideas; in it lies the solution of the much mooted questions of pedagogy. The laws of association underlie the whole field of modern scientific psychology, and form the central figure of true educational psychology."

Superintendent Hailman, of La Porte, addressed the association on "The True Test of Excellence in a School System," the paper causing considerable discussion. In her paper on the question "Should the Teacher be an Investigator," Miss Martin, of Indianapolis, urged the association to make a special effort to encourage scientific observation and inference in the school, since it is the method of our own time.

The association passed resolutions favoring a compulsory school law, a non-partisan

administration of the school system, the establishment of a children's State reading circle, and expressed its sense of duty to increase the efficiency of the profession in the State.

The association has five sections, viz: the County School and Village Section, the High School Section, the section of Institute Instructors, the Indiana Academy of Science, and the Indiana College Association. The Institute Instructors' Section had two papers on institute work before it. The first, "Educational Science as it should be Taught in the Public Schools," may be divided into three parts, the manner of conducting an institute as a meeting, a consideration of education as a science, and the presentation of this science in the institute. For the meeting place a school-house is better than a court room, public hall, or church, which have neither the apparatus nor the "atmosphere" of a school. The meeting should begin promptly on Monday. Two instructors should be employed, and six, at most seven, daily lessons of forty minutes each is all that should be given. Certain definite lines of thought should be adopted on Monday and carried through the week, thus giving opportunity to present a series of connected lessons. It should be understood that the county institute is a professional meeting, entertainment being incidental, and that it is not a place for academical work. The professional features are the history of education, the science of education, methods of primary instruction in the various grades, school management, moral instruction, and psychology.

Education is not a science in the sense that arithmetic, algebra, etc., are sciences, for "it lacks the inherent necessity which makes these subjects pure sciences. * * * It is held that education is a science in the view that it is possible to ground all the work of the school room on rationally determined principles. The processes and all the concrete work of the school instruction, management, discipline, class manipulation, all rest on principles. These ideas, generalizations, reasons, principles, when brought together and organized into coherent form, constitute the science of education." This science considers the subjects of study in the school in three related aspects; first, the educational value of each; second, the true order of sequence among the studies of the course; and third, the methodology appropriate to the different stages of each.

As to the manner of presenting the body of educational doctrine constituting the science of education in the county institute, so that the mass of common-school teachers shall be able to grasp it and base their actual work upon it, several considerations are put forward. In the first place, a week of work in an institute is not sufficient for the purpose. The works of Locke, Rousseau, Pestalozzi and of Herbert and others must be studied to the bottom to accomplish that. Again, "the science of education does not deal with receipts, prescriptions, and rules; it sets forth ideas, general judgments, reasons, principles. It must do this in the institute; do it, to be sure, in the best way suited to the conditions existing. This is to be done by clear presentation, by frequent repetition, by numerous examples and fit illustration which lie within the observation and experience of those addressed." In conclusion, the speaker said: "If education is ever to become a profession, it must be through the principle on which it rests."

The other paper was on a "Rational Method in the County Institution," which related to method, "a way of reaching an end by an organic series of steps," as enabling the teacher, while facing the distracting and perplexing details of her work, to see the organic relations of all the parts in the process, and thus to order and direct effectively everything to one end.

The first "union meeting" of the superintendents and teachers and the Northern Indiana Teachers' Associations convened at Logansport, March 28, 29, and 30, 1888. Several resolutions were adopted recommending that the appointment and retention of teachers should be a non-political matter, indorsing the work of the Teachers' Reading Circle, and approving the formation of a Children's Reading Circle, and finally voting to consolidate the two organizations under the name of the "Northern Indiana Superintendents' and Teachers' Association," holding an annual meeting.

The eleventh annual meeting of the Southern Indiana Teachers' Association met at Columbus, April 4, 1888. The association passed resolutions approving the Children's Reading Circle, urging a non-partisan administration of school affairs, and a thorough preparation of teachers for their work. This was "one of the best, largest, and most enthusiastic meetings ever held by the association."

The seventh joint convention of Ohio and Indiana City Superintendents was held at Union City, Ind., December 15, 16, and 17. The "round-table talks" were about teachers, pupils, and courses of study.

IOWA.

A normal department, having three male and three female teachers, has just been opened in Drake University, under the supervision of an experienced teacher of many years' standing. The training school of Council Bluffs has been suspended until the completion of a large building now in course of erection.

Institutes.—The statistics printed in the Iowa Normal Monthly show that institutes were held in ninety-six counties during the year, with an attendance in eighty-eight of them of 16,407, with five hundred instructors. The editor of the same journal remarks of these meetings as follows: "During latter July and the month of August fifteen thousand Iowa teachers will meet in normal institutes, and come under the influence and teaching of experienced and excellent instructors. * * * Every teacher in attendance at the institute should make it a season of educational quickening, of renewing zeal and enthusiasm, of gaining new ideas, of getting hold of better methods and ways of work, and of acquiring a broader view of the teacher's whole business. For board, travelling expenses and tuition, and examination fees, it costs the teachers of Iowa not less than \$200,000 to attend the institutes." To each institute there were, generally speaking, five or six instructors. The subjects of study were arithmetic, geography, language, physiology, history, reading, algebra, etc., and didactics.

Teachers' associations.—The thirty-second annual meeting of the Iowa State Teachers' Association took place at Cedar Rapids, December 27, 28, 29, and 30, 1887. The enrolment was 420, the attendance fully 500. The association expressed its views in the usual form of resolutions. The subdivision of townships was pronounced an evil, and uniformity of text-books urged.

The School-Masters' Round Table of Eastern Central Iowa met at Marshalltown, October 13 and 14, 1887. The discussions of this body are all informal. The first subject considered was, "Course of Reading for High School Pupils," the outcome of which was the appointment of a committee to report to the next meeting a list of books for a course of critical and collateral reading in high schools. Concerning "Overwork in Schools," the members, consulting their experience, came to the conclusion that the charge is without foundation. The "Means of Holding Pupils in School" was considered to be special courses, if the conditions of the school permit. "What a pupil in the different grades should know or be able to do" was also discussed. The spring meeting of this body was held at Cedar Falls, April 5, 6, and 7. The assembly came to the conclusion that all random exercises should be excluded from the rhetorical exercises of the primary grades, and a definite idea be kept in view as the inculcation of a sentiment or the teaching of the facts and lessons of a life. In the grammar grades they thought that the rhetorical exercises should be conducted by societies of pupils, who should choose their own officers and programme. Elocutionary exercises for the purpose of effect they condemned, though favoring the appearance before the public of every member of a graduating class with an original exercise, an essay, or oration. Taking the topics presented in Robinson's complete arithmetic as a basis, the committee appointed to report on the omission of topics reported as follows: Give little special attention to short methods; omit circulating decimals, annual interests, savings banks, stocks, bonds, etc.; exchange, foreign and domestic; arbitration of exchange; equation of payments; averaging of accounts; allegation medial, allegation alternate; arithmetical progression; geometrical progression; similar plane figures; similar solids; gauging; metric system; present worth. "Promissory notes, partial payments, and bank discount should not be greatly emphasized, if taken at all."

A meeting of the county superintendents was held May 8 and 9, at which the subject of teachers' certificates received considerable attention.

KANSAS.

The contest between appropriations for new buildings and increasing demand for admission is well exemplified in the case of the State Normal School at Emporia. In the same report that chronicles the completion of an additional wing—erected at a cost of \$25,000 and almost doubling the size of the building—is added: "But with the increase in accommodations and the consequent ability on the part of the faculty to do more and better work comes a corresponding increase in the number of young men and women."

Of the four hundred and seventy-five students of the school that gave the information, about three hundred stated that they had had some experience as teachers in the public schools, sixty having taught five or more years and several from ten to sixteen. The class of 1888, containing forty-one members, averaged twenty-three years as to age and two years of teaching as to experience. Nothing, says the president, has done more to popularize the school than the payment of mileage. It brings the school within reach of pupils in the most distant parts of the State and still keeps the expense as low as if they lived near. He also urges that provision be made for preparing special teachers of drawing, science, reading, and language, and that manual training be introduced.

Institutes.—During the summer of 1887 the Office has record of sixty-nine institutes which were to be held, but no further information.

Teachers' associations.—The Kansas Teachers' Association convened at Topeka, December 27, 1887, and discussed a variety of subjects connected with the profession of teaching and the studies of the elementary and academic grades. Among the several resolu-

tions reported was that commending the reading circle; that expressing a "sense of the practical inequality of our present taxing system, which brings peculiar hardships in educational affairs," and asking the legislature to remedy the evil; and those urging the establishment of county high schools and the grading of rural schools. These last were adopted, though the resolution relating to county high schools created a stormy discussion.

The North-western Association met at Osborne, November 24-26, 1887. The members expressed their views in resolutions to the effect that normal institutes should be classified and graded and that the graduating system be introduced, and life certificates be granted when the course is completed; that the county be made the unit for tax levies for school purposes; that text-books be made uniform throughout a county.

The South-western Kansas Association of Teachers met at Wellington, in Thanksgiving week, with about two hundred and ninety teachers and twenty normal scholars.

The Central Kansas Teachers' Association, which had held a preliminary meeting at Lyons, March 23, 1887, perfected its organization in a later meeting at Great Bend, November 25 and 26 of the same year. Over one hundred teachers and several hundred citizens were present.

KENTUCKY.

There is no information as to the new school for colored pupils mentioned in the last report of this Office. "We want in this State," says the editor of the Educational Courant, of Louisville, "real, genuine, veritable normal schools, and can do little towards advancing the standard of professional training until we secure them. We showed some months ago what constitutes a normal school, and our article was copied in numerous papers and highly commended. The main point we made was that such a school must prepare teachers both theoretically and practically, and that a school which does not do this is no normal school at all."

"Compel the Agricultural and Mechanical College," continues the editor, "to establish a model school, and give us at least two more normal schools, one in the eastern and one in the western part of the State."

Institutes.—"We are not sure," says the above-named journal, "that every county in the State holds an institute. Who can tell us?" Consulting the pages of this periodical for 1887-88, it appears that there were at least twenty institutes, generally lasting for three or four days, and thirteen meetings of county teachers' associations, five of which were meetings of organization. Judging from the recurrence of a resolution passed at these meetings that the salaries of the teachers be paid more regularly, it may be inferred that some hardship had been experienced, which the new law has in all probability removed.

The provisions of this law are in substance as follows: Each county superintendent shall on the first Saturday in October, reckoning school months of twenty days, pay the amount due each teacher of a common school, for the month or months completed, * * * and thereafter the county superintendent shall on the first Saturday of each calendar month pay the salary due each teacher of a common school for the previous school month.

The new laws or amendments, as they are technically called, to the "common school laws," also make it the duty of county superintendents to organize and hold annually a teachers' institute "for the normal instruction, improvement, and better qualification of the teachers of the county;" the institute to last five days (previously it need last but four), and is to be held in July, August, or September. The State board is to prepare and place in the hands of the county superintendent, not later than June 1, a programme of the work of the institute and a syllabus of each subject of the common school curriculum, this programme and each syllabus to be furnished to every member of the institute. Neglect to perform these duties on the part of the county superintendent is punished by a fine of fifty dollars.

Teachers and those intending to teach during the year are required to attend the full session under penalty of having their certificates (in the case of teachers) revoked.

Teachers' meetings.—The State Teachers' Association met at Mammoth Cave, and continued in session for three days. In his address the president remarked: "Three things in the theoretical organization we have been carrying out more fully the past year than before; these three things I strongly urge upon the attention of the association, and commend to its practice:

"(1) The district organizations. There is where the work has been done most effectively, where it will continue to produce the best results. The coming together, even twice a year, of a few earnest, hopeful, working representatives from the several counties comprising a district, and the opportunity thus afforded for a comparison of conditions and experiences; for mutual support and encouragement; for devising of means to

make work more effective by making it more united—all these make the district associations most productive of helpful results.

"(2) A great weakness of the association has been and is the lack of money. But more money has been used by us in the district associations this year than in any year since I have been a member. But we have only begun. There should be in the districts some definite, well-understood means of raising money, to be used in paying the expenses of special speakers, of printing, hall rent, etc. I earnestly recommend and urge some action upon this all-important point by the present assembly.

(3) The use of the press has never been, and is not yet, as frequent or as wide-spread as it should be. There is no other means of keeping our work constantly before the people so effective as the use of the press, and especially the *country press*. Our district meetings, while powerful in their influence upon teachers, yet have very little direct influence upon the non-teaching population, because very few who are not teachers attend them. But the village or county paper is read by the very citizens whose interest we must secure—whose influence must be won to our side."

Observing that the *Courier-Journal* had called the meeting a "convention," the president said he accepted the name and would frame a platform the third plank of which was, "We demand uncompromising prohibition of politics in educational matters; favoring a thorough civil-service reform upon the basis solely of competency in filling all educational offices."

The Colored Teachers' State Association met in Richmond, July 3-5, 1888. A new feature was the introduction of institute work. The association passed several resolutions, among them one calling for Federal aid to education, another expressing satisfaction with the recent action of the Legislature as to the payment of salaries, and still another condemning a frequent change of teachers, particularly in country districts.

LOUISIANA.

Other than the reported suspension of the Peabody Normal School there are no changes or matters of importance to report of institutions.

The "act in relation to free public schools and to regulate public education," adopted during the last session of the Legislature, contains several important provisions respecting the training of teachers. The parish superintendent is permitted to assemble the teachers in an institute on the first Saturday of each month, the teachers failing to attend forfeiting one day's pay. It is further provided that other institutes may be held when authorized by the board of education, such institutes to be held between the first day of April and the first day of October, in some town centrally located. Touching the city of New Orleans, which is not subject to the parish institute law, the board of directors of the parish of Orleans may establish one or more normal schools as departments for the professional training and improvement of persons desiring to become teachers.

The State held eight Peabody scholarships during the year at the Peabody Normal College at Nashville, and two thousand dollars were given by the Peabody fund trustees for normal schools.

Institutes and educational meetings.—One thousand dollars were appropriated by the Peabody Fund trustees for institutes. Of the meetings, however, the Office has no information.

The State Educational Association held its annual meeting August 23, 24, and 25, 1887, at Shreveport. In his address the president said that one of the purposes of the meeting was to create a desire to combat ignorance, that is undermining the happiness and prosperity of the State. "Such being our purpose, let us during these two days' session act wisely and harmoniously, and let the results of this conference of good people in behalf of our children be as practical as possible. The papers that will be read have been prepared with but one view—that is, to strengthen the work already begun by enlisting more friends into active sympathy with those already in the work. We must have every man and woman actively engaged in this great work. The few have attained some success, but the many will accomplish all."

In their resolution the members indorsed national aid to education and the work of the State Normal School, saying "we specially indorse the works and aims of our State Normal School and declare that, in our judgment, it has accomplished and will accomplish great good for the cause of education; and it will be a grievous mistake and injury if the people of this State do not continue to support and encourage these institutions, not only by making ample appropriations therefor, but also by encouraging and applauding its professors and giving remunerative employment to its graduates."

In another resolution the association "indorses the education of our colored population as necessary, just, and wise;" but is convinced that the races should be instructed in separate schools, and that a school of the higher order should be established in northern Louisiana, where no institution for the training of colored teachers exists.

The second annual convention of the Louisiana Superintendents of Education met at Baton Rouge, in the early part of February, 1888. Mr. Chambers, of New Orleans, in an address upon "Some Educational Needs of Louisiana" remarked that the most vital question affecting the future of the State is education; their meeting was a proof of this. In a few days the Legislature would convene and a convention of parish superintendents was of special significance and importance. Let the convention then definitely formulate the needs of the State educational system, and unanimously and emphatically express them to the law-makers. The speaker would group the need of the State under three heads, financial, of system, and general. In short more money was needed, a better system and public sentiment, and, finally, better teachers and more "State educational institutions."

We cannot follow here this fine address in its elaboration of the three topics of discussion, but it is necessary to say that among the additional institutions required was the establishment of a colored State normal school outside of the city of New Orleans, a long recognized necessity. The matter of obtaining better qualified teachers is hard to deal with, the speaker said, the difficulty lying in the low salaries paid and the shortness of the term, but it seemed to him that it should be optional with the parish superintendent whether he should employ "fifteen first-class teachers nine months in the year, teaching in forty-five schools or employ forty-five good, bad, and indifferent teachers three months in the year in these same forty-five schools." To educate the public one column of paper in each parish should be devoted to matters touching local school interests.

The superintendents then gave an account of the work in their respective parishes and a new law to be brought before the next Legislature was gone over; section after section being discussed and accepted, amended, or rejected.

Important changes in the school law were the outcome of this meeting, making it one of the most important in large and immediate results that has occurred during the year.

MAINE.

At Biddeford the superintendent meets the teachers once a month, when the various interests of the schools are discussed and improvements suggested.

In a history of the schools of Portland, published with the report of the city school system for 1887-88, the origin of the "Training and Practice Class" is thus given:

"In his first report, February 23, 1878, Superintendent Thomas Tash recommended 'the establishment of a practice class for training graduates of the high school in methods of teaching before they enter upon their work' as teachers. Such a class was established on Spring street under the care of Miss Sarah M. Taylor as principal, in September of that year. Eight young ladies were admitted to the class, under whose instruction and charge were placed the primary classes in that school. The pupils of these classes are as well instructed as in other primary schools, at the same time eight or nine young ladies are yearly becoming well trained as teachers. In 1886, forty-eight of the female teachers in the city were graduates of the Portland practice class and their work shows the value of their training in the practice class."

The sixth annual session of the Maine Pedagogical Society was held at Augusta, December 29, 1883. The president advised more attention to manual training in the schools as a means to improvement in industrial, intellectual, and moral worth. As respects language, Professor Chapman, of Bowdoin College, said that the teacher's business is first to furnish the child a vocabulary which he can understand; next, to direct his thoughts to the laws and usages of language; then, to study it with reference to its capabilities for expressing thought, and finally to bring out the elementary principles of logic. Professional reading was treated by Principal Corthell, of Gorham, who urged that in professional reading for teachers books on physiology and psychology should be prominent. As to "What and how much teaching of science in common schools should be undertaken," Professor Harvey, of the State College, said that the observant faculties being the dominant ones in childhood, they should be especially cultivated. And as the biological sciences require no costly apparatus or large cabinets, he thought that through these sciences an interest in biological studies might be awakened and made instructive under proper teaching.

Other topics were, "Expression as a means of culture," "Educational advantages of Latin studies," "The place of the seminary in the Maine school system," and "Civics as a means of study in the line of civil government," this last aiming to have a class that is studying the government of a country personate that form of government as far as possible; hold a town-meeting after the public form and method; study postal laws till they are fairly understood; discuss congressional acts in compositions and debates, and make the subjects gone over in this way as nearly life-like as is possible.

MARYLAND.

In the report of the city superintendent of Baltimore that officer observes: "I feel it to be my duty to call your attention again to the importance of establishing a training school for teachers. * * * A school of this kind is recognized by educators to be an indispensable adjunct to a good school system, as it both trains those who are to teach in the theory and practice of teaching, and rejects those who have no aptitude for such work. * * * The cost of such a school would not be great. * * * One principal lady teacher and an assistant would be sufficient to take charge of the school at first. The salaries of the teachers, together with the cost of books and of fitting up the rooms, would be the entire expense, which, altogether, would not exceed three thousand dollars. * * * It is earnestly hoped that a school of this kind may be speedily organized upon the most economical and serviceable basis. The cost of establishing and maintaining it will be amply justified by the increased efficiency of the system, secured by providing this method of selecting as teachers those only who are well qualified in all respects for the work of instruction."

Teachers' associations are recommended by the president of the Baltimore board of school commissioners as of special value to those who are conscious of their want of experience and become discouraged unless advised and assisted by those who are familiar with their profession.

In addition to the general association, of which all teachers are entitled to become members, and which holds its monthly meetings for the consideration of matters pertaining to their professional work, there is also a "beneficial association," whose benefits are for those members who need personal attention or pecuniary aid during sickness. The object is to provide a fund for the assistance of those who cannot perform their duties, and in case of death to give a sum of money to the family of the deceased. Any teacher may become a member upon paying an initiation fee of one dollar, and an annual fee of three dollars. During the last year there were 324 members and three deaths. The amount expended for benefits for sick members was \$677, and the amounts paid to families of deceased members, \$902. Since its organization in 1877 the amount paid out by reason of sickness has been \$7,123, and on account of death, \$6,880. The association is controlled by a board of directors, who are selected from the different grades of the schools, who visit and relieve the sick, and gratuitously perform other services.

From July 17-20, 1888, the Maryland State Teachers' Association and the West Virginia Educational Association met in joint session at Mountain Lake, Md. In his address of welcome the Hon. N. W. Hoffman, of Cumberland, referring to the peculiar characteristic of the joint meeting, said: "There is, too, in this first joint meeting of these two associations a special and peculiar suggestiveness. West Virginia and Maryland are not sisters merely in the sense that they are members of that numerous and eminently respectable and respected family which constitutes the Republic of the United States of North America. Close as should be and close as is, in fact, that relationship, yet are they more nearly akin than that. They are contiguous, adjoining, neighboring States. There is, therefore, a greater difficulty, a species of elbow-kinship, so to speak, as implied in that familiar and expressive old Anglo-Saxon word neighboring. In other words, there is a sort of geographical union or territorial intermarriage in the case. * * * The introduction of the free school system into each was so nearly simultaneous and so similarly circumstanced that they may fairly be said to have been of twin birth and origin. Both are yet in their infancy, each of them numbering less than a quarter of a century of existence."

Mr. Willey, of West Virginia, after referring to the cosmopolitan character of educational work, said that there are two things that the meeting could agree upon: (1) That the battle against ignorance should be broader and bolder and more comprehensive; that we should beat down the boundaries of prejudice that environ the work of education—prejudice against physical culture, against manual culture, prejudice that would discriminate between the sexes in culture. (2) That there shall be a more generous and just compensation to the toiling, weary teacher who is in the front of the battle against ignorance.

The subject of manual training being up, one essayist would define it as meaning training the hands for future activity, and as valuable for (1) the bread-and-butter argument; (2) its educational feature; (3) its discipline; (4) its moralizing influence. Mr. Anderson, superintendent of the Wheeling city schools, objected to such training as "impossible, unpractical, distracting, and doing no good." Secretary Newell, of Maryland, in discussing the subject of free text-books, would have them as free as desk- and blackboards. Pens and ink are not free in some Maryland counties. In treating of the subject of arithmetic, one speaker maintained that there is too much arithmetic taught in the schools. In discussing the subject of county superintendency, the principal of

the Hainesville (W. Va.) schools stated that a thoroughly qualified superintendent could not be got by election.

The convention adopted a resolution appointing a committee of five to attend the meeting of the educational associations of Maryland, West Virginia, Pennsylvania, and Kentucky, and report at the next meeting of their respective associations, and inviting the above-named associations and others to send delegates in like manner to the meetings of "our association." A committee was appointed to consider the means of organizing a Maryland State Teachers' Reading Circle.

MASSACHUSETTS.

The report of the city superintendent of Fall River contains a succinct account of the development of the Teachers' Training School of that city. As it undoubtedly illustrates the genesis in other cities of schools for the same purpose, the remarks of Superintendent Connell are given somewhat fully:

"From the time of the establishment of our high school, in 1849, to that of our training school, in 1881, teachers for our schools, especially females, were almost exclusively chosen from the graduates of our high school. Before receiving an appointment they were required to pass satisfactorily an examination in the various branches they were expected to teach. No professional training was given or required of them, except for a few years, when the normal department, so called, was added to the school between the dates above mentioned. The course of study for this department consisted simply of a review of the common English branches for one year by the members of the graduating class who expected to become teachers. By this change in the course of study the committee recognized and emphasized the importance of normal or professional training for teachers. No attempt, however, was made to teach the science of education, nor was any opportunity afforded to practice the art by members of the class.

"In process of time this normal instruction in the high school was discontinued, and although the graduates were urged to take a course of training in the normal schools in the State, but few did so, after graduating, because of the additional time and expense involved.

"Teachers, however, were selected, as before, from the graduates without professional training, provided they had passed the examination required. The few who attended and graduated from normal schools, however, were given the preference on account of their larger experience and professional skill, in the appointment of teachers.

"The normal schools now established in the State come far short of supplying the demands made upon them from the different cities and towns for trained teachers, and because of this fact the larger towns and cities have very generally established "training schools" of their own in which instruction in the theory and practice of teaching is given.

"Our training school was established in 1881. Its purpose is to give the graduates of our high school and other persons of equal attainments in the city desiring to become teachers the advantages of a professional training in the science and art of teaching, so that they shall be the better fitted to discharge properly the duties of the school room. From 1881 up to June, 1887, 166 persons have entered as pupil-teachers; of these 157 have been graduated, 118 have taught in this city and other towns, and 97 are now teaching in our schools; doing excellent service for the city.

* * * * *

"Without doubt the graduates of this school make better teachers because of the training they have received than they possibly could have made without it. It should be said, however, that an element of weakness begins to show itself arising from the practice of allowing all the graduates of the high school desiring to become teachers to enter as pupil-teachers, simply because they are graduates, whether they possess the necessary physical and mental qualifications to become good teachers or not. My opinion is that we have pursued this course as long as it is wise or profitable, and in its stead I recommend that pupil-teachers enter by examination. In order further to guard our teaching force from accessions to its number of persons poorly qualified, I recommend that the graduates of the training school be required to pass a satisfactory examination before their names can be put on the list of approved candidates for the position of teacher.

"In my opinion also it would be beneficial if occasionally a teacher of marked ability could be procured from some other place to teach here in a grade in which she has manifested special strength and fitness."

Boston.—"The only school whose course of study has not been revised the past year is the normal school, but its time must soon come," says the superintendent. "When the kindergarten shall have become an organic part of our school system the need will exist for a number of well-trained kindergartners. These ought to be persons not only practically familiar with the ways of kindergartens, but also well versed in the princi-

ples of education. This last, indeed, should come first; and the future kindergartener should be, first of all, a graduate of the normal school. The special instruction to fit her for kindergarten work should be the general instruction that the normal school gives."

"This means a graduate course for kindergartens, and when this change is made, it is befitting that one long discussed the extension of the normal course from one year to a year and a half, be also made."

Cambridge.—In speaking of the rather unique experiment instituted in 1884, of devoting a school having the several grades of the public schools to the training of inexperienced persons who in other respects were properly prepared for professional work, the superintendent says that with only one or two exceptions the thirty some odd ladies trained in this way have become successful teachers, and the expectations in regard to the school in this respect have been fully realized. A doubt was entertained at the time of inaugurating the experiment whether the pupils, taught by these novices would be as well taught as those attending the other schools. This objection, however, was met by claiming that the inexperience of the young teachers would be fully compensated for by the experience of the principal of the school and his assistants, and this the results of three years' actual work have shown to be true.

Stoneham reports monthly meetings to discuss methods of teaching and discipline, to consider different ways of surmounting obstacles in the teacher's daily path, to review educational work, and otherwise promote the professional character of the teaching body. Occasionally meetings have been held devoted to the work of a particular grade, and these have been more popular and, as the school committee would say, more profitable than the general meeting in which few of the teachers can be induced to take an active part.

During the year the teachers of Athol organized for the purpose of holding teachers' meetings, several of which were held. At their last meeting for the school year the members were addressed by a member of the Bridgewater Normal School, who spoke on "Teaching of History in the Public Schools."

The Office has information concerning the meeting of teachers of Essex, Hampden, Middlesex, and Norfolk Counties. At these meetings questions of professional interest were discussed. They last for one day only.

The Martha's Vineyard Summer Institute held its annual meeting from July 16 to August 17. This institution, the oldest of the summer schools, it is believed, is chartered under the laws of Massachusetts, and has a large and commodious building of its own. The school is on a promontory that juts out into the Atlantic, rendering it a delightful place of summer residence. One of the departments, in charge of a State educational agent, is devoted to training of teachers.

Teachers' meetings.—The 43rd annual meeting of the State Teachers' Association was held in Boston, November 26, 1887. General Francis A. Walker spoke of the recent action of the Boston school committee in curtailing the study of arithmetic and explained the reasons of the action. In the first place, home lessons in arithmetic were prohibited on three accounts, the encroachment of the study upon other studies, which can not be rectified when the pupil studies at home; the inequality among the pupils as to home surroundings when pursuing a task requiring concentration of mind, and the facility with which exercises too difficult can be stopped when they are done in the school. In the second place, it was believed that much force and energy were wasted, and even injuries sustained, in carrying on the study of arithmetic as it had been conducted in many schools.

Superintendent Stone, of Springfield, spoke of the "Modification Needed in the Grammar School Curriculum." He considered that geography and history are not properly handled as studies, and would include drawing and music. Superintendent Edgerly, of Fitchburg, thought that one of the most essential modifications needed is to meet the case of children who are unable to attend school regularly. It is impossible for these children to pursue the curriculum arranged for them.

In the primary section the subject of language was up. Superintendent Aldrich, of Quincy, said that as a distinct study language has only been ten years in existence, and because of this newness a feeling of uncertainty exists as to the manner in which it should be taught. Mary J. Lovejoy, in her paper on "Light Reading," urged the importance of early instruction.

The Bay State Teachers' Club held its annual meeting at Boston, October 29, 1887. Superintendent White, of Cincinnati, in his address to the club on "What may be fairly expected of our Public Schools," said he thought the imparting knowledge common to individual men should be one of the prime features in fitting the child for coming life, and that particular attention should be paid to his behavior. The secretary of the State board, Mr. Dickinson, recommended the use and study of language, as the rational study of language is the study of man. He outlined a course of study that should be pursued in the public schools, and said it would be unfortunate to crowd into them that which is of no practical use to the scholars. Messrs. Scudder, Lambert, and Atwood spoke of the

necessity of cultivating the moral part of man, and Dr. Mayo said that the teachers should be put in more vital communication with the public, so that the people would have a clear understanding of the aims and objects of the schools, and the teachers, in turn, would become acquainted with the views of the community on the most important question of manual training.

MICHIGAN.

The State board of education, in its last report, notes the advance of the addition to the normal school building, which when completed will fully meet the demands now being made upon the school. A library building has also been provided.

Teachers' institutes.—On this important topic the superintendent, in his report for the year ending December 31, 1887, remarks:

"The value of these local professional schools has become thoroughly recognized by the teachers of the State, and the benefits that result from a regular attendance and close attention to the instruction given are unquestionable. They have come to be a necessity, especially to the teachers in the district schools. The institute affords the only opportunity that a large majority of these teachers have of informing themselves as to the latest methods of instruction that have proved successful in our best schools. A most gratifying indication of the growth of appreciation of the value of the institutes on the part of school officers is shown by the readiness with which district boards assent to closing their schools to allow the teachers to attend. A few years ago the sentiment against closing schools during the session of an institute was so strong and so general, that it was deemed inexpedient to appoint any during the term of school. This necessitated crowding all the institutes into the few weeks of vacation, rendering it possible to utilize the services of our best instructors in but few counties. This opposition is gradually disappearing, however, and now not only do boards generally comply with the request to close school during the week of the institute, but in many cases the department is requested to appoint the institute during school term to insure the attendance of the teachers."

Still using the report of the State superintendent, we find that the attendance has kept pace with the growing popularity of the institute, three-fifths of the teachers of the counties being in attendance on the institutes of the year. One of the most gratifying features of this attendance has been the increased interest in the institute manifested by the teachers who most need their aid—the teachers holding third-grade certificates. During the year 1887 nearly 60 per cent. of the attendance were of this class.

It is complained of by the conductors of the institutes that the teachers of the ungraded country schools do not understand what the institute aims to do for them. Its purpose should be made known by the secretary of the board of examiners, who now has succeeded, to some extent, to the duties of the county superintendent.

Touching the duration of the institute, the superintendent thinks that a session of two weeks is the best, since the idea of the Michigan institute is "more to suggest the method than to make an exhaustive study and application;" besides, the expense would be too great. In some counties, where the fund is large, several institutes, each of a week, have been held, with very satisfactory results.

It is found that institutes held during the school term are as fully attended as those held during vacation, while work is better. The sentiment is general among instructors that too many topics are considered.

During the year sixty-five institutes were held, with a total enrolment of 6,354, a slight decrease as compared with the previous year both in institutes and attendance. The total amount expended for the institutes during the year was \$8,954, about four-fifths of which came from the county fund, a per capita cost of \$1.40.

Teachers' meetings.—The thirty-seventh annual meeting of the Michigan State Teachers' Association was held during December 27, 28, and 29. The organization of this association is somewhat different from that of other bodies of the kind. What is good for one grade of teachers has been deemed good for all, and sections for city superintendents, grammar school teachers, and primary school teachers have not been formed. Hereafter, however, there will be a special department for primary teachers, and the organization now known as the Association of County Secretaries and Examiners will be more closely connected with the teachers' association. In the Examiners' Association the following resolutions were adopted:

• Whereas it is generally understood by the educators of Michigan that our district schools are failing to meet the demands of the present time; and

Whereas the said partial failure is due to a want of proper legal authority to organize and control said district schools: Be it therefore

Resolved, That we, the members of the Examiners' Association of the State of Michigan, in convention assembled, do request the superintendent of public instruction to

seek such legislation as shall secure the following: Township system of organization for the district school and a system of grading for district schools.

In his inaugural address President Ewing spoke of the necessity of teachers organizing themselves into an association and taking a stand in the community, and thought the university should show a livelier interest in their association, and in concluding called on the members to unite in an effort to secure the township system. Principal Sill, of the State Normal School, addressed the meeting on the topic, "To what Extent are Thought and Feeling Mutually Exclusive?" Referring to Professor Payne's three laws—(1) From aggregates to elements; (2) Mutual exclusiveness of thought and feeling; (3) Progress from the confused to the definite—he held that the first and the last are practically identical and lie at the foundation of teaching, but that the second is only true under certain conditions. In concluding, he maintained that in the vast majority of cases thought and feeling are not mutually exclusive; that this law is not true unless limited, and when limited it is useless. The paper was much discussed. In discussing the "New Education an Outgrowth of the Old," a lady essayist said that kindergarten work cannot be learned from books. It is applicable to primary and grammar schools, but cannot be engrafted in its entirety.

Superintendent White, of Cincinnati, spoke on "Universal Education the Duty of the Hour." The State has plenary power, and the cry of the child must be heard. The State should educate (1) as a means of military defense, (2) as a means of material prosperity, (3) that liberty may be perpetuated. Discussing the question of psychological instruction in high schools, it was maintained by a member that such instruction was necessary, since so many young men and women graduates from them become teachers. "The Teacher in Society" was discussed by the superintendent of Ithaca, who maintained that social intercourse was a preventive of dogmatism and narrowness, and enabled the teacher to become a positive force for good in the community.

The public school superintendents held their meeting at Lansing, on May 10 and 11. The general sentiment of the association seemed to favor a judicious enforcement of the compulsory education law, and of the truancy law also, though it was opposed to truant schools, except for large cities. The opinion was decidedly in favor of substituting calisthenics, singing, marching, "individual permission," etc., for the usual play recess. A paper on "The Relation of the Superintendent and the Teacher" provoked an animated discussion, bringing out statements that the superintendent should have five leading qualifications—knowledge of methods, education, executive ability, manliness, enthusiasm, and love for his work, and that a prominent fault among teachers was a lack of broad and accurate scholarship. The kindergarten and the manual training questions received attention and provoked opposition, both being admitted to be good things in their place, which was not in the public schools, those opposing them would say.

The Schoolmasters' Club held its annual meeting at Ann Arbor, on May 5, 1888. The work of this body was apparently devoted to secondary education. Professor Demmon, of the University, spoke of technical grammar. As grammar, as well as geography and arithmetic, is somewhat under a cloud now as an instrument of culture, the heads of the professor's remarks are given in full abstract. (1) Technical grammar is an instrument of culture in training the reason faculty in quickly and accurately interpreting language. (2) Grammatical knowledge as such is a preparation for studying foreign languages. (3) Grammatical principles are an aid in correctly speaking and writing. (4) The difficulty of the subject in some of its phases and the importance of a rational grading in presenting it are: (a) danger of trying to explain to beginners what must be incomprehensible to them; (b) of having them parse and analyze matter above their comprehension; (c) of the study degenerating into mere routine and memorizing; (d) of corrupting the English idiom through rules and manufactured false syntax; (e) dangers arising from treating etymology and syntax separately.

At the Bay View Summer Schools of 1887-88, it is said that more than one hundred teachers were enrolled in the kindergarten classes under Miss Matilda Ross on the first day of the meeting, while later on one hundred and fifty calls for good teachers in Michigan schools were received. In the art department free-hand drawing and modelling in clay were taught by Mrs. Sterling, of Chicago. Dean Wright, of Boston, lectured on New Testament Greek; Professor Winchell, on practical geological excursions; Miss L. Jones, on English literature; Professor Mills, on art; Cady, on music; Fall, on physiology and botany.

MINNESOTA.

In 1885 the Legislature provided for a new normal school at Moorhead, and in 1887 appropriated sixty thousand dollars for a building. The site, the gift of a citizen, contains six acres. The building, when completed (the school opened August 29, 1888), will be 177 feet long, 80 feet wide, and three stories in height, the entire building being

devoted to school purposes. On the first floor are the rooms for the model and the kindergarten departments. The second floor contains the president's office, the library, a reception room and four large recitation rooms. The third floor contains rooms for writing and drawing, the chemical and physical laboratories, a room for botanical work and a museum.

In discussing the subject of State Normal Schools, State Superintendent Kichle calls attention to their influence and progress. Their right to exist and their claim to support are now beyond all controversy. He calls attention to their urgent demands for increased accommodations, particularly at Mankato and St. Cloud; while at Winona better facilities should be provided for a "ladies' home" for the female pupils. Teachers' certificates, he says, need attention, and he recommends that the Legislature provide, (1) for the licensing of graduates of normal schools to teach; (2) for examining and licensing persons to teach in the State who have proper education, skill, and experience; (3) for an appeal to higher authority by the district teacher or superintendent in the matter of a teacher's qualifications, in the interest of all concerned.

Of the total number of teachers employed (7,555), 571 were graduates of a normal school and 1,427 had attended such an institution. The net increase of teachers was 269; a decrease of about one hundred in men appears, however. The increase in the hundred was in the case of normal school graduates about one, and in the case of those having attended a normal school 1.5.

The president of the normal school board of the State speaks of the schools in the following terms: "The board appointed a committee of its own members, during the past year, whose duty it was to visit and examine carefully the work, the management, and general efficiency of each of these schools; and it is the belief of the members of that committee, after visiting them, reviewing their course of study, examining their general management, witnessing their methods of instruction, and observing the actual work of the class room, that thorough and efficient work, good and healthful discipline, and a high degree of normal training is being accomplished by each of these institutions.

"Being so important a part of our magnificent system of public instruction, it is, I believe, the sense of the board that they should assume as rapidly as possible their peculiar functions as normal schools, exclusive of the preparatory and general work, which the condition and circumstances of our people make, for the present at least, an absolute necessity. * * * The board has inaugurated, during the last two years, a few changes of more or less importance, in the business management of the schools, and in the courses of study pursued, looking toward a more perfect unity of the normal school system under their control. These four normal schools constitute one system. They are not separate, independent, competing, and antagonistic institutions; but all of one system, and located in different parts of the State for the convenience and easier approach of the people. * * * It is also the opinion of the board that the diplomas of the normal school should be made a permanent license for those holding them to teach in any of the common schools of our State at least. It is also the judgment of the board of normal school directors that its numbers should be increased to nine at least."

The character of the enrolment of the schools as to previous scholastic training will be shown by the following table, the items not being necessarily mutually exclusive:

Graduates of high schools.....	64
Taught one term or more.....	353
Having first grade certificate.....	32
Having second grade certificate.....	273
Having third grade certificate.....	84
	380

At Winona the "average age" of the pupils is 19.9; at Mankato, 19, and at St. Cloud 20.8 years.

Minneapolis.—The plan for a teachers' training class, mentioned in the last Report of this Bureau, does not seem to have materialized, since the superintendent pleads eloquently in his report for 1887 for this indispensable means of providing for local educational demands. He says that the necessity for providing trained teachers has caused normal schools to be instituted in nearly every State, but that such schools are as yet unable to supply the demand. This and the desire to give a homogeneous character to their instruction have induced most of the large cities to create normal schools and classes of their own. If in older cities, where comparatively few changes occur, a training class has been thought necessary, why is not such a class still more necessary in Minneapolis, where so many new teachers are required and changes have been so frequent?

St. Paul.—Two distinct lines of effort are carried on in the teachers' training school of this city: (1) The teaching and training of the children who attend it; (2) the initiation of young teachers into the true theory of education and the application of that theory to actual school work. "The value of the professional training can be estimated only from the service which has been rendered by the graduates of this school." The

school has three departments—training, practice, and model. In these, special attention is given to the principle of teaching, government of schools, methods of school management, and history of pedagogy. It is found very necessary that the elementary branches be thoroughly reviewed. During the year substitute teaching has been a marked feature, the average of substitute work being over three weeks to each member of the class.

Institutes.—Sixty-five institutes were held during the year, having an enrolment of 4,470, a decrease of two institutes and of twenty-four in enrolment. Of these, those holding first-grade certificates number 270, those holding second-grade 2,101, and those holding third-grade 1,093, a slight increase in each instance over the preceding year.

In his report the State superintendent, speaking of teachers' institutes, says that institute instruction extends to every county in the State, and that in several counties the rule has been established that certificates are not to be granted to persons who do not attend. He recognizes the validity of the demand on the part of several counties that more than a week should be given to this work, though believing that, as a rule, one week of good work is the most serviceable. He highly commends the energy of many of the county superintendents in securing a full attendance and faithfully attending to their duties.

Teachers' meetings.—The eleventh annual session of the Minnesota Educational Association was held December 27, 28, and 29, 1887, at St. Paul, with a good attendance. President Gray, of the St. Cloud Normal School, spoke on the relation of the normal to the high schools, stating that the function of the high school was to impart knowledge; that of the normal school to confer skill in imparting knowledge. Normal schools should raise the standard of their professional work, while high schools should show their faith by sending graduates to the normal schools. Superintendent Moore, of Lake City, thought the normal school should do less academic and more professional work, and Superintendent Bechdolt showed statistically that the academic work of the normal school is less complete than in well-regulated high schools. His figures were objected to by several members as far from conclusive. Superintendent Hammond, of Madelia, spoke of the tenure of office question, holding that surety of position would not benefit the teacher so long as district suzerainty prevails. As long as the district authorities looked on all teachers, good and bad, as subject to their will, no good can come to the profession. The discussion of this paper was somewhat animated, and a committee of five was appointed to consider it and to confer with the State superintendent in regard to proposing legislation. A discussing of the subject of drawing showed that that important subject has not received the attention it deserves at the hands of school authorities.

The State association of county superintendents convened December 26, at St. Paul, and adjourned the following day. The president took for the subject of his address, "Shall the county superintendent be a politician or an educator?" The superintendent is a representative man, and to mistrust him is to mistrust the people who elect him, and the question resolves itself into "the relation of the superintendent to parties and to party politics." In a peculiar sense is the office a touchstone of public honesty and purity of judgment. "As of our teachers we ask only, 'Are they competent, are they moral, are they devoted and sympathetic?' So have we," said the president, "a right to demand that we be examined in the same way." The State superintendent spoke briefly of the prospective work of the department and of the great common school problems to be solved by county superintendents. The township question, school libraries, temperance hygiene, and the wise use of the increased school fund, to go largely to the rural districts. The township system was discussed at considerable length, and a committee appointed to consider the subject. School architecture and temperance hygiene were touched upon.

MISSISSIPPI.

The Mississippi State Normal School, which has lately been reorganized, is now under the immediate control of the State superintendent and the superintendent of Marshall County. It is the aim of this school to prepare teachers for the public schools of the State, competent not in books alone, but in all the great principles that are so necessary to make good citizens.

At Walthall a school having the title of Walthall Normal School was established in September, 1887, by a number of public-spirited citizens forming an educational joint stock company, which, with the amount subscribed for stock, quickly erected a building to accommodate the "better school" the members found themselves in need of. The school has a preparatory course, an introductory scientific of two years, and a commercial, a surveyor's, a scientific, and a classical course, each of four terms. In addition to these, there is a teachers' training course also of four terms. In the first term the study of philosophy of education is added to the common branches; in the second term mental science is added; in the third, rhetoric, algebra, physiology, English literature and methods constitute the curriculum; and in the fourth book-keeping takes the place of algebra, philosophy that of physiology, and penmanship that of methods.

Teachers' meeting.—At the teachers' meeting held at Jackson, December 23 and 29, 1887, it was recommended that examinations be held on four days in the fall and four days in the spring, instead of three days, as now; that teachers examined in one county and seeking employment in another be refused a license until their examination papers have been examined by the superintendent who appoints them; that a two years' license be granted to a first-grade teacher whose examination papers average between 90 and 95 per cent., and that the second State license, obtained at the expiration of the first, be made a professional license, valid for life, provided the teacher remains in the profession. It was also recommended that counties be empowered to employ expert institute managers, that a State normal school be established, and that chairs of pedagogy be established in the university and in the agricultural and mechanical college.

MISSOURI.

Kansas City.—The city superintendent, in speaking of the desirability of establishing a training department, observes that such a class should be formed in justice to the graduates of the high school, who, desiring to become teachers, should serve an apprenticeship before they are permitted to teach. This work should be carried on under the eye of an experienced and skillful teacher—not a watcher, but a teacher who knows how to teach and who can teach others the science of teaching provided their pupils possess any native talent.

Institutes.—The Office has information that twenty-one summer institutes were to be held at as many places, each lasting for four weeks each, and that many others were to be held, the place of meeting, however, not having been determined on.

Teachers' meetings.—During the last days of December, 1887, three of four sectional associations of the State held their annual meeting: the South-west Association at Marionville, the North-east Association at Moberly, and the Missouri Valley Association at Warrensburg. The colored State Teachers' Association held its meeting at St. Joseph, during the holidays, and the county commissioners met at Sedalia, continuing in session for two days, and adjourning to meet with the State Association at Sweet Springs in June following.

The State Teachers' Association met on June 19, 1888, and remained in session for three days. The afternoon of the first day was consumed by papers treating of psychological subjects, and the morning of the second by a discussion of the English language in the various grades of schools. The lady essayist presenting "English in the Primary Grade" would use stories in biography and in arithmetical work, begin sentence development about the fourth grade, as also the development method of teaching the various parts of speech. In presenting the subject of "English in the Grammar Grades" the essayist maintained that the child had taste for the beautiful in literature, and that it should be cultivated by bringing it into communion with the beauties and inspiring thoughts of our best writers. *Masterpieces* rather than the *lives* of authors should be studied. English in the high school, said the gentleman presenting that grade of the question, should have as much time as mathematics or the classics. To develop an appreciation of the finer shades of thought conveyed by words, their origin and meaning must be studied. Drill in composition and correct language are required, and but a few authors should be studied. In presenting the college course another essayist claimed that instruction in grammar and rhetoric often defeats the purpose contemplated. Language study is a study of the modes of thought of writers, and to obtain a perception of this a few selections should be well studied, and the pupil having caught the *modus operandi* will apply it himself on other occasions.

The afternoon session was devoted to relations—the relation of the county commissioner to country schools, of the teacher to the patron, of the State to education. The morning session of the last day was devoted to considering "The Teacher in the School" and to "The Teachers out of School." In the school, said the gentleman presenting the question, the teacher does more talking than a minister or other public speaker; a probable average is 17,500 words daily. As an agent to train pupils to search for knowledge the teacher is invaluable. Out of the schools, said the lady having charge of this side, and especially during vacation an opportunity is given to the teacher to study social life, nature, and books, all most excellent means of professional development; for the teacher who knows most about the world and its requirements is the best. The afternoon session was taken up with papers on county, city, and State supervision. The first advocated a uniform course of study, examination for promotion, normal institutes, and the reading of educational literature; the second spoke of the relation of the city superintendent to the patrons and the necessity of his studying their interests, of being the friend and adviser of the teachers, and of being thoroughly familiar with their individual work; the third spoke of the qualifications of the State superintendent and of improvements in the system of public schools.

Among the several resolutions adopted by the annual convention of county commissioners, held June 21, 1888, at Sweet Springs, were, that endorsing county supervision and entreating each county commissioner to agitate the question in institutes and in public; that asking that each commissioner prepare an outline of work and a course of study and advocate its adoption in the rural districts, and that the law respecting the effects of stimulants and narcotics be so amended that this instruction be made compulsory upon all pupils, "without a written request from parents or guardians."

MONTANA.

The Montana Territorial Institute of 1887-88 opened its session at Helena, December 27-29, with Mr. Wylie, of Roseman, president, and discussed "Language Teaching in the Public Schools," "The Work of the County Superintendent," "Music in the Schools under the Tonic-Sol-Fa method," "What Topics in Common School Arithmetic?" As to the last, Mr. Harmon, of Roseman, attacked the text-books in use, and advocated the preparation of a book that should contain the necessary matter, free from the superfluous contents that now encumber many arithmetics. Mr. C. F. Lee, of Butte, dwelt on the importance and due order of precedence of the sciences in public schools, giving place first to physical geography, and following it with natural philosophy, chemistry, geology, and astronomy. He spoke with special stress on the significance of chemistry in such a mining region as Montana, where every stage of the mining processes was founded on fundamental truths of chemistry. He advocated teaching by experiment throughout.

NEBRASKA.

The twenty-second annual meeting of the Nebraska State Teachers' Association took place at Fremont, March 27, 28, and 29. The president, in his address on the question, "Are Our Schools in Harmony with our Present Social Conditions?" observed that formerly every house was an industrial institution and its inhabitants in some capacity laborers, thus evoking forethought, judgment, ingenuity, frugality, and industry. From such social conditions has been evolved our own complicated civilization, vigorous and harmonious beyond parallel. Material conditions are powerful in determining a people's character. The schools direct the energies that have brought about these results. The schools in their evolution have developed in a line independent of other educational agencies. Hence the antagonism between them and the so-called practical in life. Manual training will remedy this opposition. We are slowly, but surely, nearing the time when the technicalities of the expression of thought will be supplanted by things calculated to develop thought itself.

In an address on "Simplifying the Work in the Country Schools," efficient teachers, the establishment of county high schools, and fewer branches in the common schools were advocated. In the paper on "The Work of the Grammar School" technical grammar was condemned, and Latin or German advocated. "An Outsider's Views of the Schools" was, that there was entirely too much nepotism, and that county superintendents were forced to leave things undone that their duty demanded; book monopolies abound, and the graded system yokes the brilliant to the dull.

The association passed the following among other resolutions: (1) That as the title of professor is properly applied only to teachers in institutions of university and college rank, the association condemns the misapplication of the title.

The college, common school, and county superintendent's section held separate meetings. In the college section it was agreed to include the academies and other preparatory schools of the State; in the common school section "two needed reforms" were suggested, a broader basis in the common school course and the adaptation of the college course to correspond with the common school, and not fix their own standards for the common schools to come up to. In the superintendent's section "Institute Work for the Coming Summer" was discussed conjointly with a "Uniform System of Text-Books in the State" with a result showing that a majority were in favor of uniformity in the county but not for the State, and that it is not desirable to furnish free text-books.

The South-eastern Association held its meeting at Beatrice, November 24 and 25, 1887, with an attendance double that of the preceding meeting.

NEVADA.

During Thanksgiving week, 1887, State Superintendent Dovey, of Nevada, conducted at Reno an institute for the teachers of the State, which is said to have been attended by more than half of such teachers, some of them coming a long way to secure the benefits of the institute; one 150 miles by stage. A State Educational Association was also organized, the first meeting to be held at Carson.

NEW HAMPSHIRE.

The State Normal School at Plymouth has received an appropriation of \$12,000, with which a new building will be erected, to relieve the overcrowded condition of the old one. As originally organized, the institution is said by the State superintendent to have been little more than an ordinary academy, with a teachers' class attached, which received special instruction and practice in school work. Teachers and patrons of other seminaries in the State protested against the authorities building up an academy at Plymouth at public expense to compete with institutions equally good. The objection was acknowledged as just, and the school became strictly professional. As a consequence, the attendance languished. Having imbibed a prejudice, people are slow to disabuse themselves of it, says the superintendent. Had the school started as a normal school prosperity would have come earlier. To prejudice against the school was added ignorance of its necessity, but experience has removed the one and enlightened the other.

Dover.—The school committeemen have selected the teachers for the city schools in most cases from the graduates of the high school, and in future they will adhere to this rule. A training school should be established without delay, where not only high school graduates, but other residents of equivalent culture, who choose teaching as a profession, may have the opportunity to secure practical instruction and training to prepare them for their duties; for a "knowledge of the human mind, and especially of the laws of development, is now justly regarded as one of the most important studies for a teacher." Teachers, they say, as well as the public, are slow to comprehend that teaching is a profession, and as such is based upon principles which it is necessary to learn to apply.

In concluding, the committee say that they cordially approve of the plan inaugurated by the teachers of supporting a pedagogical library for themselves.

Portsmouth.—In discussing the subject of pupil teachers the superintendent says that the day is past when the idea prevailed that any one can teach, especially a primary school, for it is becoming more and more recognized that a teacher should be trained before being trusted with a school. This necessity of training was recognized in Portsmouth to some extent by requiring inexperienced teachers to go about among the schools for three months to observe the methods. "There is a strong doubt in my mind," says the superintendent in a previous report, "whether this training is sufficient. Three months is a very short time in which to learn how to develop and train a human being for useful life." The system of pupil teachers is not altogether a success, he thought, since there is neither skilled oversight nor definite course of study, while the pupils consider that they are conferring instead of receiving a favor by their tours of observation.

The school established to supply the training thus called for has proved the fallacy of the only argument urged against its foundation, that the teaching could not be so good having so many inexperienced teachers practising upon the children in the school. During the year these children have advanced more rapidly in their studies, and have done their work more thoroughly than in any other school in the city. "These are facts," says the city superintendent in his last report, "and a little consideration will show that such ought to be the case, for the teachers have in recitation only small classes, and can give them much more individual attention than is possible in any other school. From this school children never go home with the plaint that *they have not recited to-day*, as sometimes happens in other schools where one teacher has to attend to fifty little ones. Then again we have at the head of the school a superior teacher, an expert, who is directly and solely responsible for the teaching throughout the whole building."

Institutes.—For forty years the value of institutes as an important factor in education life has been recognized in New Hampshire. Occasionally abused, they have ever been popular when properly conducted. The present system was established four years ago as a help in elevating the professional character of the teaching corps and awakening a public interest. The expense of attendance has been reduced to the lowest possible degree, and the best talent has been secured to conduct the work.

"Work in an institute can not all be new," says the State superintendent, whose last report we are using, "and would be less valuable if it were. * * * Much of the value of institute work is in the diversity of views presented. *AN* can not use successfully the same models." It is no loss to the schools, the superintendent thinks, for teachers to attend these meetings. "They are relieved and strengthened by an interchange of views and sympathies, and are lifted out of the ruts in which they have become accustomed to move."

During the year ten institutes were held in as many counties, having in all an attendance of 1,009, and costing \$1,775.

Teachers' meeting.—The New Hampshire State Teachers' Association held its thirty-fourth annual meeting at Nashua, October 27, 28, and 29, 1887. A paper on "Teaching

Spelling in Primary Grades," advocating teaching it by the writing and the oral method, called forth a vigorous debate. The drift of the discussion of the question, "What is the Best Course of Study for High Schools?" was toward magnifying the importance of scientific studies and the study of the mother tongue, and increasing the time given to geometry and lessening that devoted to analytical mathematics. "Do not crowd the curriculum," was the warning of both the leading speakers on the question. The subject of drawing was before the association, the essayist advocating its introduction in every public school grade. The ubiquitous question of manual training also received attention at the competent hands of Miss Fay, of Springfield, Mass.

After appointing a member to write the history of the association, resolutions were adopted (1) approving the action of the Legislature in refusing to repeal the town school system; (2) endorsing the pending bill for providing free text-books; (3) appreciative of county institutes; (4) endorsing the Blair educational bill now pending in Congress.

NEW JERSEY.

With the year ending August 31, 1887, 1,188 teachers have been graduated by the normal school during its existence of thirty-two years, of whom 26 per cent. are now teaching in the State; or, considering the number graduated during the last ten years, 477, 64 per cent., about.

Of the 3,891 teachers holding State, county, or city certificates, 12 per cent. had been granted by the State, 51 per cent. by the county, and 37 per cent. by the city school authorities. Taking the three years last past previous to the date of his report, the superintendent gives the following comparative statistics:

Grade.	County Certificates.			City Certificates.		
	1884-85.	1885-86.	1886-87.	1884-85.	1885-86.	1886-87.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
First.....	18	19	20	56	67	67
Second.....	22	24	24	27	23	18
Third.....	60	57	55	17	10	15

It will be noticed how the increase from the first to the third grade in the case of the county certificates is completely reversed in the case of those of the city.

In speaking of the term of service in the same school, the superintendent remarks on the favorable result the statistics of his State will show when compared with those of other States. He gives the following statistics as indicating efficiency, "for, as in every other profession, no amount of training in theories will supply the place of actual experience in their application:"

Period covered, in Years.	Teachers in the same School.		Teachers having Experience.	
	State.	Cities.	State.	Cities.
1 or less.....	1,036	166	431	110
1 to 5.....	1,566	695	1,347	598
5 to 10.....	642	441	977	435
10 to 15.....	383	315	565	330
15 to 20.....	189	165	339	267
20 to 25.....	68	60	142	81
Over 25.....	25	34	118	64
Average.....	4½	7½	7½	9½

Commenting on these figures the superintendent says that "only about 26 per cent. of all the teachers in the State have served in the same school one year or less, about 8 per cent. have served in the same school longer than fifteen years, and about 18 per cent. have served longer than ten years." The average is three months longer than that given in his report preceding. "Less than 9 per cent. of all the teachers in the cities have been in their schools one year or less. About 54 per cent. have served longer than five years, and about 30 per cent. longer than ten years."

Paterson.—The work of the normal school was suspended from September, 1887, to January, 1888, on account of the lack of room. "There is much that needs to be done,"

says the superintendent, "to increase the efficiency of this department, and I renew my suggestion in a former report that a fully equipped practice department be developed for the use of this school, and that the school be furnished with a pedagogical reference library."

Teachers' meeting.—The thirtieth annual session of the New Jersey Teachers' Association was held at Trenton, December 28, 29, 30, 1887. The attendance was about five hundred. An exhibit, carefully graded and the second of its kind, attracted considerable attention, drawing and the work of the lower grades being especially prominent. The president, in his address, dwelt upon the need of forming habits of morality and thorough work at an age when they can be most easily fixed. The principal aim of our schools should be to form such. The time not required for this should be used in developing the powers of mind and body by educating the faculties of reason and judgment. Less explanation and more practice in early life is the prevailing thought. The child should form habits in oral and silent reading, of comprehending the thought of a sentence at a glance; also the habit of taking unconscious note of the spelling, and of hearing and retaining the pith of all discourses heard. Superintendent Poland, of Jersey City, would promote 50 per cent. of the class on their record in class and take the teacher's record as a criterion in the lower grades. Principal Griffin protested against (1) measuring a child by his answers to the pet conundrums of committeemen, (2) the idea that the vicious and idle child should be promoted because he has answered three-fourths of these conundrums, (3) the practise that a conscientious, hard-working pupil who has failed to answer three-fourths of the conundrums should not be promoted, and (4) the farce of examining first-year pupils in text-book information in order to ascertain those fit for promotion.

Principal Green, of Long Branch, after giving the result of his inquiries on manual training (q. v.), said that graduates of high schools, though prepared by normal school graduates, were not admitted to the pedagogical course of the normal schools in which their teachers had been trained until they went through the grammar school course of those normal schools. "Either the normal school does poor work or it should acknowledge the work of its own graduates."

The second day was given to the New Jersey Reading Circle, whose benefits were acknowledged. On the last day Superintendent Jacobus, of New Brunswick, under the title of "Cobwebs," spoke of that one which deemed that one primary teacher could properly instruct 79 to 140 children during the day. A second cobweb was the idea that the results of an examination show the results of instruction.

It was resolved that in the six grades of license the ages 16, 17, 18, 19, 21, and 25 be changed, respectively, to 18, 19, 20, 21, and 25; that "theory and practice" be added to the third grade county requirements; history of pedagogy to the first grade county requirements, and psychology to the third grade State requirements in the place of trigonometry. Applicants for a higher grade of license will now need to be examined only in those branches not covered by the lower license held. Pupils having diplomas of high schools in which the course of study is equivalent to that of the State normal school are to be admitted to the pedagogical or second class without further examination. The association also gave as its opinion that the school tax should be raised from four to five dollars.

NEW YORK.

The normal schools, says Superintendent Draper,¹ have never done better work than during the year 1887-88. The Empire State has nine of the best normal schools in the country. These schools are full, do good work, and send forth graduates who readily find employment. They are more and more closely confining themselves to their legitimate work of training teachers for the public schools. Yet they do not and can not supply the needs of the State for professionally-trained teachers, nor can they be increased to the extent which will serve the purposes of the State. Normal work of a lower grade, less in extent and nearer the homes of the people, must be had before the wants of the rural schools can be supplied. It is idle to think that the time and money involved in pursuing a normal school course will be given in order to obtain the miserly salary of a district school, with the probability of losing even that before a year.

Differences exist between "normal school men" and "academy men." The normal school has an academic department, the academy trains teachers. The past is responsible for the academic departments in normal schools, and to suppress such departments would be dishonorable unless a new bargain were made with the locality where the normal school is situated. But why not prevent non-residents of the locality from entering this academic department of the normal school; why not reorganize this normal "train-

¹ The Powers and Obligations of Teachers. The Work of the Last School Year. An address before the New York State Teachers' Association, July 6, 1888.

ing class" of the academy so that it will become in truth and in fact a part of a State normal system? Let the "training class" be taught by a professionally-trained teacher, and open to those only who are proficient in subject-matter and pledge themselves to teach in the public schools. The course of study should be uniform throughout the State, and when completed a teacher's certificate and not a meaningless paper should be conferred. It is perfectly feasible to do this; all that is necessary is deliberation, consultation, and agreement. But it can not be done if boards of trustees are to be permitted to hand training classes over to teachers and tell them to make what money they can out of them, or to improvise training classes for the purpose of sharing in public moneys.

The normal schools, training classes, uniform examinations, and teachers' institutes are the four instrumentalities for protecting, perfecting, and advancing the teaching service. Separately they are not very effectual, but acting together results will soon follow. Teachers must have something more than a fair education. Their essential equipment is ability to arouse interest and stimulate intellectual activity whether they teach a high school or a primary class, a city or a country school.

When the four agencies form a comprehensive and harmonious system, professional training can be obtained by those who desire to teach, and a teacher's certificate only by those who are professionally trained, a healthy revolution in the school affairs of the State.

The most important event—Superintendent Draper says "the most important movement since the establishment of the free-school system"—of the year is the adoption of a system of uniform examinations by the county commissioners.

A year ago—we again have recourse to the superintendent's address—after the act upon this subject had failed to become a law, the State association unanimously requested the school commissioners throughout the State to make application to supply them with printed question papers for use in simultaneous examinations which should be made the basis of teachers' certificates. Sixty-five of the one hundred and thirteen commissioners made the request, which was cheerfully complied with. The issue began in September, and in January, when a new set of commissioners came in, the following circular letter was addressed to the school commissioners of the State by the superintendent:

"The following regulations and forms of certificates in reference to uniform examinations for teachers' certificates are hereby established and prescribed for the guidance of school commissioners who signify their intention of conducting their examinations of candidates for commissioners' licenses under the plan and regulations outlined to go into effect January 1, 1888."

These regulations are classified under six heads, and are in brief as follows:

(1) Grades of certificates.—Teachers' certificates issued by school commissioners shall be of three grades, first, second, and third. Those of the first grade continue for five years and may be renewed without re-examination; of the second grade for two years and may only be renewed upon re-examination; of the third grade for six months and may not be issued to the same person more than twice, and must be limited to a particular grade or school.

(2) Qualifications of candidates.—As to experience, candidates for the first grade must have taught successfully for at least two years. As to educational requirements, candidates of the third grade are required to pass an oral examination in reading and a written examination in arithmetic, composition, geography, grammar, orthography, penmanship, and physiology and hygiene; for the second grade in the same and in the additional subjects of American history, civil government, current topics, and elementary drawing from copies and from objects; for the first grade, in the same as for the second grade, except reading, and in the additional studies of algebra, book-keeping, elements of physics, methods, and school law.

In examining for the third and second grades the same questions are to be asked for the same subjects, the grade being determined by the standing. The candidate for a third-grade certificate must attain at least 60 per cent. in arithmetic, geography, grammar, and orthography, and an average of at least 60 per cent. in all the rest. The candidate for the second-grade certificate must have attained 75 per cent. in arithmetic, geography, grammar, and orthography, and an average of 75 per cent. in the rest. Candidates for second-grade certificates are to be exempted from examination in any subject in which, when candidates for a third-grade certificate, they attained 75 per cent. For certificates of the first grade separate examinations are to be held. Candidates must attain at least 75 per cent. in arithmetic, geography, grammar, and orthography, and an average of 75 per cent. at least in other subjects, and are to be exempted from examination on any subject in which they have attained 75 per cent. in an examination held by the State department of education for a State certificate.

No paper that shows a standing of less than 50 per cent. is to be accepted. School commissioners may in their discretion supplement the written examinations by oral

questions, demand a higher percentage, refuse to examine a candidate, or grant him a certificate.

(3) The examinations for second and third grades are to be held in each commissioner's district on the first Saturday of January, March, April, May, September, October, and November, and on the second Tuesday of March, August, and September. Examinations for the certificates of the first grade shall begin on the second Tuesday of March and August, and continue for two days.

(4) Certificates of the first and second grade are to be valid in any commissioner's district in the State when endorsed by the school commissioner.

(5) All papers submitted by candidates are to be endorsed in ink by the school commissioner, with the standing attained and filed, subject to the order of the State superintendent.

(6) Blank certificates will be prepared and issued for the use of the commissioners by the department of public instruction.

Under date of July 17, 1888, the State superintendent again addresses the school commissioners in a circular letter in which he says:

"It is with pleasure that announcement is made that all the school commissioners of the State have adopted the system of uniform examinations. * * *

"Persons having any thought of teaching should be urged to take the examination whenever possible, even long before they stand in need of their first certificate or of the renewal of the old one. Teachers should be continually encouraged to try the examinations whenever practicable, for the purpose of gaining certificates of a higher grade than those previously held. It will be found that the regulations have been modified with a view to preventing any unnecessary repetition of examinations, and for the purpose of encouraging teachers to rise through the higher grades.

"I feel not only like expressing to the commissioners my appreciation of that commendable devotion to the public school interests which has led all of them to voluntarily enter upon this most important undertaking, but also like congratulating the people upon the successful establishment of a system which seems destined to lift up the teaching service of the State, and work a revolution in the quality of the instruction in the schools."

The act permitting the superintendent to issue certificates to a graduate of a college or university and to endorse certificates and diplomas issued in other States is given under the head of new legislation, in a preceding chapter.

Brooklyn.—"If we had to choose," says the superintendent, "between method and no method, between teachers that are methodical machines and teachers that are aimless and unmethodical, we should certainly select the former, for any plan is better than no plan. But since the establishment of the training school, to a measurable extent at least, we are relieved of the necessity of making this selection. Its graduates have been trained in sound educational doctrine as well as in sound educational method. * * * But unfortunately our training school can not turn out its graduates in sufficient number to supply the demand. Its utmost capacity is less than sixty-five graduates a year. Last year there were two hundred and five new teachers appointed, of whom only forty-five were graduates of the training school. I would, therefore, recommend that the new building on Heyward Street be organized as a second training school."

Rochester.—The plan of conducting the teachers' institute the past year has been somewhat changed. The teachers of each department, primary, intermediate, and grammar, meet on a given day, those of each grade in separate rooms, and discuss questions pertaining to their special work. These institutes proved to be so interesting and profitable that the same plan will be pursued hereafter.

Institutes.—There are no statistics of the work, but we have the authority of the State superintendent for saying that it has greatly improved, that attendance has been larger and more regular, discipline better, the work more systematic and progressive, and the institutes smaller.

It is the intention to arrange a course of institute work which shall be continuous from year to year and year after year for three or four years. By this plan annual repetition and chance will be avoided and results ensured. One of the most important steps of the year was the introduction of drawing into the work of the institute, and it is hoped to put it in all the schools by this indirect means. With the opening of the fall institutes under the supervision of the American Museum of Natural History, and in the same way which Dr. Beckman has followed in New York City and Brooklyn, it is contemplated to give the institute pupils an evening's entertainment and instruction. The scenery of the State, natural and artificial, will be shown in graphic form and talked about.

"In short," says the superintendent, "I desire it understood by the teachers of the State that I consider the institute one of the most important helps of our work, and one which should be brought to the highest degree of perfection and efficiency possible. The law exacts the attendance of all teachers outside cities, but I ask you to join with me in making the institutes worthy of your attendance, so that you will not be there be-

cause the law exacts it, but because it is well for you to be there. We have the facilities for making the model teachers' institutes of the country, and we must be satisfied with nothing less."

Teachers' meetings.—The forty-third meeting of the New York State Teachers' Association convened at Watkins, N. Y., on July 4, 1888, and remained in session three days. In his report the chairman of the "committee for increasing the efficiency of the association" referred to the attendance at Elizabethtown, which was two hundred and fifty. Few normal school teachers attended; of the one hundred and thirteen school commissioners about forty; from the colleges practically none. Other and better organized associations seemed to be drawing away from their own. He submitted that the association, like a country school, needed organization; that there was need of a permanent place of meeting and of many changes in the constitution. The constitution he proposed was adopted, and Saratoga fixed upon as a permanent place of meeting after 1889.

Superintendent Whitney, of Ogdensburg, read a paper proposing that training classes be established in each county where teachers may be trained for first-grade certificates. Several papers were read tending to show the necessity of manual training; an abstract of that by Professor Sheldon is given in Chapter XV. Superintendent Draper's address has been so largely used both in this and in a former chapter that it is not given here.

The following resolution, referring to the adoption of uniform examinations, was adopted: That we extend to Superintendent Draper and to the members of the committee appointed by this association, and to the commissioners and superintendents who have co-operated, our hearty thanks and pledge our further co-operation; we express the hope that the thirty city superintendents not yet in line with us will soon join hands with the commissioners in making the system a unit throughout the State.

The fifth annual meeting of the Council of School Superintendents of the State was held at Rochester, November 17, 1887, with about forty superintendents present. Superintendent Beattie, of Troy, in his paper on "How the compulsory school laws may be made more effective," said it was resolved as a special need that some places of detention for delinquent children, with industrial school training, ought to be established in sufficient number to meet the requirements of the case. Also, that every community ought to be required to furnish sufficient school accommodations for the entire school population, and that if the law does not warrant the appointment of truant officers it ought to be amended to provide for such appointment in all cities and important villages, with adequate compensation for the officers.

After discussing manual training in the common school system, it was resolved that such training is desirable, but to what extent could only be determined by circumstances of different localities, and that until its scope is fully defined great care should be used not to displace anything in the regular course of study that has the sanction of long usage and has met reasonably the demands of the public.

On the question, "whether examination for teachers' certificates should be made uniform throughout the State," State Superintendent Draper said that the contest over that point in the last Legislature, in which such a bill was passed, but vetoed, put new life into the discussion of school topics, and that now, in three-fourths of the commissioner districts, papers by the State department of public instruction are in use. The council unanimously approved this action, and resolved that teachers ought to be examined according to a fixed uniform standard; having entered on work should be subjected to a probation sufficient to determine their capacity to manage and direct a school; and, having passed such a probation with success, should be secure of continuance unless removed for proven cause.

At the last session of the council the committee on an industrial State public school for poor and dependent children declared their resolution to continue the effort to secure such a school.

Then, after discussion of the "basis of promotion," and "the disposition to be made of pupils that fail to meet requirements for it," "subjects and methods of discussion in teachers' meetings and associations," were presented, and other business disposed of. Utica was made the place of meeting in 1888, and Superintendent Snow, of Auburn, was chosen as president of that meeting.

The thirty-third annual meeting of the New York State Association of School Commissioners and Superintendents met at Binghamton, January 18, 1888. Mr. White, of Syracuse, in an address as president, spoke of these meetings of teachers as of great importance, and thought the law should make the time spent by the teacher in attending them no pecuniary loss to him, and that town association meetings should be held on regular school days. He favored the township system and special training for rural teachers. The principal of the Potsdam Normal School spoke of the school commissioner as a hygienic inspector. It was his duty to see that the schools, teachers, and pupils were tidy and the school-houses ventilated. The commissioner of Onondaga, in discussing "The Teachers' Institute," said that the very teachers who need their in-

struction were those who failed to attend, and he would have the certificate to teach depend upon full attendance during the five days the institute lasted. He advocated the district institute, and the publication of a complete programme. The instruction should be practical; instruction in the elementary branches, not fine-spun theories and lectures, should be given. Fully 18 per cent. of the licensed teachers failed to attend the institutes during the year. The commissioner of Broome County read a paper on "Recent School Legislation," in which a plea for the improvement of the country school was urged. Mr. Draper, in his address on the duties of the school commissioner, said that the commissioner was the one man authorized to modify the limits of school districts. His also was the duty of supervising and preventing the farce of a poor school, and to abate nuisances in the shape of buildings and outhouses. The commissioner must use all his power to promote the highest interest of public education. His full time is required, and should be given to the work.

NORTH CAROLINA.

"While we have many good teachers," says the State superintendent, "we have a much larger number of inferior ones. Many of our teachers are themselves school boys and school girls, without sufficient knowledge in books, and especially without training in school government and management, to fit them to take charge of the very important and responsible duties of teaching and governing children."

The same officer recommends the establishment of a thorough system of county institutes and examination of teachers, and that all teachers be required to attend. Also a training-school for white teachers and the abolition of the summer normal school for whites.

The school known previously as the New Berne State Normal School has changed its location, and is now known as the State Colored Normal School, at Goldsborough, N. C., whence it issues its "first annual catalogue." The State has fourteen scholarships at the Peabody Normal College at Nashville, which are all filled.

There is a pronounced demand for a normal college. The normal schools (institutes) for the whites have done great good, but a regular normal college would do more, especially if a better system of county institutes were established. Such action is to be asked of the General Assembly at its next meeting; which body, it is hoped, will adopt the plan. A start for higher training of teachers is what is needed now.

Institutes.—The State received \$750 from the Peabody Fund, which was expended on eight institutes in sums, with two exceptions, of one hundred dollars each. "Each of our normal schools (institutes) is in session annually from three to four weeks," says the State superintendent. "These schools are for instruction of white teachers. The colored people have appropriations by the State, amounting to twice as much as the appropriations to these institutes for the whites. The money for instruction of the colored people is applied at five different points, and at each point the school is in session about nine months per annum. These schools for the colored people are under the control of boards of directors, composed of white persons, and in each one there are employed as instructors three or four competent colored persons."

At the Hyde County teachers' institute it was resolved that provision should be made for the establishment of a teachers' training or State normal school, to be in session at least eight months of the year, and whose faculty during vacation should be required to conduct the institutes held in different parts of the State.

Teachers' meetings.—The fifth annual session of the North Carolina Teachers' Assembly convened June 13, 1888, in the assembly's new building at Morehead City. The first day was devoted to the dedication exercises; of the other proceedings we have no account.

There is quite a movement in educational circles for the purpose of promoting among the teachers and friends of education "social acquaintance and enjoyment, broader general information," consideration of the best methods of teaching, mutual and practical aid, etc. The name by which those associations are known is "teachers' council," and they seem to be organizing quite rapidly throughout the State. Any teacher or friend of education may become a member. The meetings are held on a Saturday once a month.

OHIO.

Numerous county institutes and teachers' meetings have been held during the year, but we have but meagre statistics; too meagre for presentation, in fact. Of the many educational associations—State, sectional, tri-county, and inter-State—held during the year, the forty-second annual session of the Ohio Teachers' Association, held at Sandusky, June 26–28, 1888, claims our attention principally. In his inaugural address Superintendent Clements, president of the superintendent's section, maintained, (1) that

people generally do value education, and, to the extent of their ability, use the means provided for the enlightenment and training of their children; (2) that they do not agree as to what makes an education valuable and practical; (3) that teachers, as well as patrons, are not agreed as to what the education value of the different subjects of study is; (4) that educators are not agreed as to the principles on which education should proceed, and hence not agreed as to the methods to be employed. Not considering the third and fourth divisions, we will give some quotations from the remarks of the speaker bearing on the first and second:

"We need no better evidence of the value put upon education in this country than the time and money devoted to it. More than seven millions of children were in daily attendance at the public schools during the present year. It is not easy to estimate the money value of the time of these children. If they had been put to work, their earnings would have gone a great way toward the support not only of themselves, but of the families to which they belong. It is quite impossible to determine the amount paid for books, clothing, and other supplies necessary to keep these children in school. The amount expended yearly by public school officers is a little more definitely known. From the most reliable information at my command I am satisfied that the value put upon common school education by the people of the United States is not less than \$250,000,000 annually. Our people are altogether too practical to make such liberal investments of time and money in enterprises that promise little or no return. They know there is value in education."

* * * * *

"Multitudes of people care little for religion, and do less for its support. Multitudes, also, have little concern for the political affairs of the country, notwithstanding they must live under the laws made by those elected to office. There are, however, comparatively few who are not deeply interested in the education of their children, and who do not make great sacrifices for its accomplishment."

As to what it is that makes education valuable the speaker said: "Notwithstanding this general appreciation of education in the minds of very many, it is not at all clear in what this value consists. There is an impression that somehow it raises one's standing in society, it helps him in business, it increases his comfort and happiness. The father says: 'I want my boy educated, so that he may not be obliged to dig for a living, as I have had to do.' The mother seeks to have her daughter educated, that she may be able to move in polite society, and, if ever she has to earn her own living, that she may do it in a more genteel way than by serving in a kitchen."

"This of course is a very low view of the case, but it goes to show that each one fixes a value upon education according to what he wishes or expects to receive from it, and not according to what true psychological and sociological principles would give to it."

* * * * *

"The word practical is applied to that which is useful in distinction from that which is ideal or theoretical. A practical education, then, is one that can be put to use in such ways as the possessor may desire. It is not simply ornamental, but is available in carrying on the business of getting a living, in the performance of our duties as citizens, and the working out of our destiny as men and women."

* * * * *

"Does the possession of a given number of facts or principles which relate to the various kinds of business in which men may engage form any considerable part of a practical education; for example, the number of quarts in a bushel, or the number of acres in a section of land? If so, it must be evident that a person's education can be made practical to him only so far as the facts he has learned can be used in his particular calling."

"We might apply this line of argument to every kind of business, and we should find that there are a few facts, principles, and laws—few in comparison with the whole number that might be known—useful in all occupations, but that each calling requires a knowledge of certain facts not useful in any other, unless very closely related to it."

"What is commonly known as mental discipline constitutes a far more potent and valuable factor in practical education than the mere acquisition of learning. It is strange that the advocates of practical education can not see this, and, on the other hand, it is exceedingly unfortunate that many of those who place a high value on discipline, place a correspondingly low value on the acquisition of knowledge for utility. If they can secure the symmetrical development of the whole mind, they seem to have accomplished their purpose, and care little whether the information acquired is useful or not."

In his paper on "Training for Citizenship in Public Schools," Dr. R. W. Stevenson said that the teacher had a twofold duty to perform, (1) "by the discipline and government of the pupils and systematic training to obedience to rightful authority, integrity, industry, acute moral sense, and patriotism;" (2) by imparting "such a knowledge of the

government, national, State, and municipal, as becomes citizens of a government whose people is the highest authority and the final court of appeal on all political questions."

The president of the association, Dr. Alston Ellis, in his inaugural address said: "When I became a member of the Ohio Teachers' Association, early in the seventies, the all-absorbing topic of discussion was the relative value of the classics and the so-called natural sciences as subjects of study. Wordy was the disputation. The sword of argument was wielded by able hands. There were giants in those days, unless it be that distance of vision makes the characters that bore so conspicuous a part in that controversy go through a process of *looming*. The ground of debate has but slightly shifted since then. The swift-recurring seasons of pedagogical refreshment have seemingly brought with them new issues, but a study of those issues shows them to be but the natural and logical outgrowths of those that went before. The former advocates of science hold a consistent course to-day in standing in the forefront of those clamoring so pertinaciously for manual training in the schools. They lauded scientific study because of its hand-shaking acquaintance with the material side of life. For the same reason they see in the proposed union of school-room and work-shop, recitation-room and kitchen, a happy realization of much for which they have contended. * * * Those who favored the classics have widened the definition of the term. They have ceased unduly to exalt the literatures of extinct tongues. In English literature they recognize a treasure-house of original thought expressed in such terms as to carry it straight home to the intellect and the emotions of the reader. They would have the instruction given to the young touch all the eternal elements in their nature with quickening power."

The character of the speaker's address can be best stated in his own words, and was "in the nature of a protest against the materialistic tendency of the age, against that low, utilitarian idea of life that is dominating the minds and souls of our countrymen."

Superintendent Hartzler, in speaking of the County Teachers' Institute, said that in the absence of county supervision and "certain other things we ought to have," it is to be feared that too little is being done to reach the masses of the teachers of the State; each of the eighty-eight counties should have an institute. Mr. Holbrook thought that the progress of the institute was impeded by two conditions. In the first place, the examiners did not attend (which they should do, as they need quite as much as others "the information, suggestion, and inspiration of the institute"), while their absence discredits the institute in the eyes of the teacher. In the second place, the antagonism between those who desired pedagogical instruction to enable them to teach well and those who desired the instruction that would enable them to pass a good examination should be compromised. The compromise the speaker would propose was that these professional meetings should be academic only so far as to illustrate methods—"the institute should teach methods by teaching subjects." Superintendent White, of Cincinnati, after defending the institute from criticism which he thought implied by the remarks of previous speakers, would make no compromise with that class of teachers who demand that the institute shall be a means of preparing them for getting teachers' certificates. In his paper on the "Defects in the Public Schools of Ohio," Mr. Chaney spoke very much to the same effect as the president: "Let the school become the exponent of cleanliness as the church is of godliness; get clean teachers to inculcate clean secular doctrines and rigid moral civics, and such a reformation will sweep over this land as no nation has ever yet seen." Dr. Harris, of Concord, Mass., spoke "On the Necessity of Colleges to Supplement the High Schools."

The Eastern Ohio Teachers' Association was held at Steubenville, November 25 and 26, 1887. A paper was presented on the "Utility of English Grammar," on which a protest was made against unmeaning definitions; and analysis, diagrams, and parsing were advocated. Professor Gardy would answer the inquiry, "Why should we study pedagogy?" by saying that the mind must be understood before it can be trained. The session was concluded with a paper on "What we owe to our Pupils."

The South-east Ohio Teachers' Association held its meeting at Logan, November 25 and 26, 1887.

The North-west Ohio Teachers' Association held its nineteenth annual session at Fostoria, December 26, 27, and 28, 1887. The meeting was opened by a lecture on "Politics in Education." On the second day of the session ex-Governor Foster took the ground that there should be no school supported at public expense higher than the grammar grade. A resolution was passed requesting the General Assembly to enact the township system; bring about (1) uniform length of term; (2) uniformity of text-books; (3) a clearly defined but flexible course of study, and (4) a board with executive authority and with responsibility.

The State Association of School Examiners met at Columbus, December 28, 1887. Resolutions were passed urging the Legislature to provide for the expiration of the term of county and city examiners at the end of the school year, the examiners to be so appointed that the term of one examiner shall expire each year, and that they be required to make their report directly to the State school commission; that a proper interpreta-

tion of the school law does not permit examiners to extend the time for examination for one certificate to two or three successive examinations within the same quarter; that examination fees for State certificates be turned into the State treasury and the examiner be paid a specified sum, the fee to be three dollars to five dollars; that physiology and English literature be added to the common school course; and that boards of county examiners be given power to compel attendance of witnesses in cases involving the revocation of certificates. After voting to sustain the exertions of the State commissioner of schools in his efforts to have the present sub-district system of schools changed, the body adjourned.

The Superintendents and Principals' Round Table met at Warren, January 13, 1888. All the discussions were conversational and informal. Teachers' meetings was the first subject taken up. The members seem to agree in thinking that the chief object of such assemblages was to beget a good professional spirit and to maintain the courage and enthusiasm of the corps of teachers. As to professional reading there was no dissent to the statement that the most meagre outfit of a teacher is one good educational periodical, two or three good books on teaching, one good general newspaper, and one good literary magazine. A graded course in arithmetic prepared by Samuel Findley was discussed at some length. On the question of examinations and promotions various opinions were brought out. On one side it was maintained "that the unity of our work hinges on them," as they give the judgment of superintendent and teacher. On the other it was maintained that the daily record gave the daily judgment of the teacher. Against daily records it was urged that it requires the major part of the teacher's energy for marking, leaving but little for teaching. The question of percentage of attendance coming up, it was almost unanimously decided that many false statements had been published in reports about this matter. It was also decided that there should be a distinction between "tardy" and "late." A committee was appointed to examine the school law to ascertain if the parent has any right to say that his child shall not study grammar, for instance.

The Ohio and Indiana superintendents held a meeting at Piqua, February 24 and 25, 1888, at which questions relating to the attendance of pupils at school, free text-books, and hygienic criticism were discussed.

On the 24th of the same month the South-western Ohio Teachers' Association convened at Hamilton, and listened to papers on "Practical Botany," "What may we do to direct the Home Reading of our Pupils," "Teachers and Teaching," "The Classics again, or shall we teach them," "School-room English," and "The Teachers' Opportunity."

At the second meeting of the Eastern Ohio and Western Pennsylvania Superintendents' Round Table, held at Youngstown, Ohio, March 9 and 10, were discussed a report on a graded course in arithmetic, a report on school statistics, and a report on parents' right to select studies, followed by essays of a purely pedagogical nature. The Round-Table Meeting of the Superintendents and Principals of North-eastern Ohio and North-western Pennsylvania was held at Greenville, Pa., and will be noticed under that State.

OREGON.

The provisions of the new law relative to the examination and certification of teachers are given in an earlier chapter of this volume; as to the employment of teachers, the superintendent speaks as follows:

"The selection of teachers is often a difficult and delicate duty. The school directors are frequently beset by relatives of the applicants. Local influences are brought to bear. In some cases teachers are fearlessly and impartially chosen without regard to favoritism or nepotism in any form, while in others nepotism and partiality have prevailed without regard to the ability and experience of the person employed. The present method of examining teachers has been thoroughly tested for the past two years and the results have been carefully examined, and the general outcome of the work is a sure guarantee for educational success, and will aid in the selection of teachers. * * * Some directors think that young teachers should be preferred, because they possess claims on account of local residence, need of employment, and other reasons. Such influences should not prevail, and only those applicants who have the best qualifications, literary, professional, social, and moral, should be selected."

Institutes.—During the year the several district institutes required by law have been held at the county seats as a rule, and with good results. The county institute is now obligatory. Touching these the State superintendent remarks:

"There is no doubt that these conventions are of great benefit to teachers, as all active, thoroughgoing teachers concede this. While this is true, the institutes are not accomplishing all that is expected. The time allotted for the work is generally too short,

and for the annual institute the time set apart for the session should not be less than five days.

"In some instances the instructors have hardly time to present the outlines of their topics. Again, time is often frittered away in the discussion of questions of minor importance. Again, time is sometimes wasted by the extended discussion of special hobbies. The time should be largely devoted to the presentation of the most approved and latest methods of instruction."

Of the fifty-eight institutes that should have been held during the two years covered by the report only thirty-five were held. In attending twenty-one of these the State superintendent was obliged to travel 7,300 miles. The superintendent has prepared for the use of county superintendents and institute instructors the following "daily programme of a normal institute for six days:"

Forenoon.

General discussion by the entire institute, 9 to 10 o'clock.

Time, 10 to 10.30.		Time, 10.30 to 11.		Time, 11 to 12.	
First Day.	Second Day.	Third Day.	Fourth Day.	Fifth Day.	Sixth Day.
Orthography, Methods of and Principles.	Reading, Methods of and Principles.	Arithmetic, Methods of and Principles.	History, Methods of.	Language, Methods of.	Geography, Methods of.

Afternoon.

General discussion by the institute, 1 to 2 o'clock.

Time, 2 to 2.30.		Time, 2.30 to 3.		Time, 3 to 4.	
First Day.	Second Day.	Third Day.	Fourth Day.	Fifth Day.	Sixth Day.
Object Lessons, Methods of.	Penmanship, Methods of.	Arithmetic, Methods of and Principles.	Language, Methods of.	School Organization, Methods of.	School Recitations, Methods of.

The programme is merely suggestive of the work that may be accomplished, within the time specified, by an active conductor and assistant instructors, who give strict attention to economy in time and methods of work. The programme itself may be readily revised to meet the wants of the several districts and counties. Evening exercises may consist of lectures and general discussions.

To the members he would suggest that they—

- (1) Attend each session promptly and regularly.
- (2) Make copious notes of the work done and keep them for future use in the school-room.
- (3) Give their earnest attention to the instructors and enter heartily into all general exercises.

(4) Ask questions of instructors at the close of each exercise.

(5) In general discussions confine themselves to the general principles of the question in hand and not distort the discussion into "pet" specialties and personalities, remembering that the institute is a school and not a debating society—to instructors he would suggest that they are to teach rather than lecture.

Teachers' meeting.—The Oregon State Teachers' Association held its annual meeting in the capitol at Salem, July 6, 7, and 8, 1887. The meeting was attended by three hundred and twenty-five teachers, not only of the elementary but of the secondary and superior institutions of learning.

In the department of superintendence two of the great problems of the day, country schools and institutes, were up, manual training not appearing. The association has a novel feature, a department of music. In this were discussed (1) the best methods of teaching vocal music in public schools; (2) what should be the character of school music; (3) vocal music as an opening and a closing exercise; (4) methods of training childrens' voices.

Local meetings are increasing in number and in some instances have become in reality a teachers' institute.

PENNSYLVANIA.

In his last report State Superintendent Higbee speaks of the normal-school question in the following terms:

"In former reports we have had much to say in reference to our normal schools, which need not be repeated here. It is enough to call attention to the fact that in a Commonwealth requiring over twenty thousand teachers, if we hope to secure professional skill we must have normal schools. Such is the uniform experience of every State and nation where education finds public recognition. If our normal schools are to furnish teachers for our high schools only we have too many of them. If, however, they are to reach down to our primary schools as well and help to fix firm the foundations upon which all must rest, the eleven which we now have, although remarkably well attended, fail in supplying the demand. We regard these schools as a necessary part of our common-school work, and insist upon their watchful attention to the history and methods of instruction in every department of study which is embraced in the work of our common schools. They need and deserve the generous support of the State. We have for a long time thought that they should be more closely connected with the State. Without doubt the circumstances surrounding their inception fully justify their peculiar organization, and arouse the educational interest and zeal of the districts which are challenged to meet the severe demands of the law; the time has not yet come, we think, for any great change. We have no special legislation to ask in their behalf other than that they be generously supported in their work by the State."

Erie.—The training of the high-school graduates in the elements of practical teaching has met with greater success than was anticipated. Not theories and words, but skill in imparting knowledge has been the aim of the instruction.

The teachers' training class was organized September, 1883. The class of 1884 contained fourteen members; that of 1885, twenty-one; that of 1886, nine. Of the first class, eight do very good to good work in management and instruction and five do fair to good work. Of the second class six do very good to good work and eight fair to good. Of the third class five are making a very good or a good record, and three stand fair to good. Not every member of the class had become a teacher, and in making the comparison the best teaching has been taken as a gauge. The class has insufficient accommodations, and the superintendent thinks that it will be a decided step in advance when they are supplied. The teaching of the graduates of the training class has demonstrated their superiority over the graduates of the high school who have become teachers.

Philadelphia.—During the year three hundred and ninety pupils left the school, distributed as follows:

Obtained principals' certificates.....	29
Obtained assistants' certificates.....	157
Obtained trial certificates.....	21
Withdrew while teaching.....	9
Left during the term without submitting to the final test in teaching.....	10
Graduates who "did not intend to teach".....	11
Incapacitated by ill health.....	2
Needed at home.....	5
Deceased.....	2
Removed.....	19
Admitted but never attended.....	41
Failed during the term.....	51
Failed at examination.....	33
Total.....	390

The average age of the pupils in the school, 1,230, December 31, 1887, was seventeen and one-fourth years.

Two departments were added during the year—a kindergarten and a cooking department.

The course of study of the kindergarten department embraces psychology, history of education, physical culture, music, free-hand drawing and modelling, kindergarten philosophy, and practice in teaching. At the close of the year those who desire to teach will be examined in the above-named subjects, and those found qualified will be awarded certificates to teach in the public kindergartens.

The cooking department was established under the auspices of the Public Education Association, with the authority of the board of education and by direction of the committee on Girls' Normal School. At present it is supported by private contributions. It is thought that it will contribute largely to the proper education of the normal pupils. The instruction is confined to Class B, numbering 280, each of whom will receive during the year twenty lessons. The work, which is satisfactory to teachers and pupils, embraces the philosophy and chemistry of cooking, given through lectures and daily lessons.

The *minimum* age for admission to the normal school is fixed at fourteen. On the un-

desirability of fixing the limit so low, the principal remarks: "It is sad to see, every year, the almost superhuman efforts made to control the children in the school of practice by those who, because admitted to the school so young, are comparatively children themselves. And the final result, in many cases, is failure, or its equivalent to them, a trial certificate. It is sincerely hoped that should the board of education in its wisdom establish a girls' high school, as is now contemplated, they will see the great importance of fixing a riper age for admission to this [the normal] school."

In this comprehensive and thorough report we find a note of the work of the graduate students, whose teaching continues to give the most gratifying results. Although all labor assiduously for success, some attain it only with the greatest difficulty because too young to perform the duties required, while others fail because teaching is not their vocation.

Wayne County Summer Normal School, Honesdale.—In the summer of 1887, in response to the request of a number of teachers and directors, a summer normal school was opened and conducted in the Honesdale High School for four weeks with marked success and the most gratifying results. Encouraged by the results of this session a similar one was to be held during 1888, with increased facilities and a better knowledge of the wants of the teachers of the county. The object of the school is to thoroughly review all the common branches taught in the schools of the county, to discuss their organization and the aims of elementary teaching and its methods and means, to present education as a science, and finally to show the use and value of illustrative apparatus.

Institutes.—Sixty-six county institutes were held during the year from September, 1887, to January, 1888, and three city institutes. These institutes were in session five days each and were attended by 19,917 actual members, including 16,998 employed in the common schools of the counties. The directors present numbered 3,045, and the spectators 36,250. The number of instructors and teachers present was 641, and of essays read 214. The cost of these meetings was \$50,135, of which \$12,727 was paid by the county treasuries and \$15,321 by members.

Speaking of these meetings, the State superintendent says:¹ "To gain a clear, general knowledge of the educational work of the State one must attend the county institutes. In these annual conventions the superintendents can be seen in the very midst of their activity with all their teachers marshalled around them. Here, also, many of the most active school directors can be met, together with many of the most intelligent citizens, who thus show their interest in public instruction. Here, indeed, all the educational forces of the counties are in consultation, for our institutes serve a double purpose. While not neglecting the normal drill and instruction of the teachers, they awaken public sentiment in reference to their work and success. Hence here the various educational tendencies of the State reveal themselves, and can be studied as nowhere else, and either checked or encouraged as the case may seem to require."

In comparing the Pennsylvania system with that of an adjacent State the superintendent says: "We prefer the Pennsylvania system; for, while demanding the best exertions of the superintendent in behalf of his teachers and their work, and giving him full freedom to make himself powerfully felt in their advance, it at the same time challenges large communities to an increased interest in the work of the schools, and gives the State department the very best opportunity of knowing the educational interest and sentiment in the various communities of the Commonwealth."

Teachers' meetings.—The thirty-fourth annual session of the Pennsylvania State Teachers' Association was held at Scranton, July 3, 1888. Education as a qualification for voting, the beautiful as an educational factor, temperament in education, education and heredity, education and crime, and education and industry were before the association during its several days of session. Questions so large as these require, even as abstracts, more space than may here be given; an abstract of the several speeches on industrial education, however, will be given in Chapter XV, Section III.

Dr. Wickersham in his paper on "Free Text-Books" said: "To make a school free, you must make all free that belongs to it. To the school belong the house, the furniture, a teacher to impart instruction, and suitable apparatus to aid him in the task, and to these must be added the text-books, for they are the teacher's tools and as necessary to the pupil as a seat or a black-board. Without free text-books systems of schools are not free."

Miss E. M. Reed, late principal of the Reading training school, in her paper on "Primary Work; its Purpose and its Character," grouped her remarks under four heads—the intellectual, the moral, the æsthetic purposes in primary work, and, finally, its character. The primary course is from six to ten. At this age presentative power is most active, and memory and imagination are standing ready to use the products of knowledge gained through the senses. Reason and judgment will soon catch the disjointed threads of facts, weave them into comparisons, and measure off generalizations,

¹Pennsylvania School Journal, Dec., 1887.

But facts must be furnished and the greatest stress should be put upon the sense-conceptive power. A common fallacy among teachers is to think that the "moral welfare" of the child will take care of itself. False excuses should not be listened to and sham of all kind avoided. Practical every-day acts of self-control, honesty, and obedience on the pupil's part are worth volumes of precepts to the child, when he is a man. Closely allied to moral training is cultivation of a sense of the beautiful. Call attention to the beauty of the clouds, to the beauties of a brilliant sunset, the harmony of colors, and of symmetrical forms, and read stories, such as Ruskin's "King of the Golden River." Primary teaching, in the first place, should be objective, and in the second, oral.

Professor Heston, of the State College, would answer the question, "What can the University do for the Common School?" by saying establish chairs of pedagogics, to train men in the science of teaching—not the technical work of the normal school, but the training of educators, who shall create and mould educational sentiment. The "chair of pedagogics" would train men for professorships in normal schools, who would put life into the science of education.

Mr. Shimmell, of Philadelphia, presented the "Teachers' Tenure of Office." No feature of the American educational system, he said, is so discouraging to teachers as the uncertainty of their tenure of office. Low wages, frequent examinations, and short terms all tend to degrade the profession, but the worst of all is to be dismissed without cause. If the teacher cannot be dismissed before the end of a term unless for "incompetency, cruelty, negligence, or immorality," why should he be dropped at the end of a term unless for the same reasons? It is a deplorable fact that many teachers fail to make a re-election because they are antagonized by a few influential men with a grievance. It may be said that a charge of incompetency or negligence would be hard to prove; and indeed these terms are so indefinite, that thousands of dismissals are wrongfully made by virtue of their comprehensiveness. Teachers sure of their tenure might become indifferent to their professional progress and duties, it may be said. Not so; uncertainty, not certainty, destroys ambition and enthusiasm.

Superintendent Sturdevant, in his paper on the "District Superintendency," said that more than one-half of the entire number of schools in the State are single, ungraded, country schools. The number of children attending the country schools is not known, but it is probably more than half of the 930,000 in the State. Notwithstanding the neglect of these schools by "doctors of pedagogy" and "distinguished foreign and domestic visitors," they are neither numerically nor vitally less important than the better provided for city and borough schools. Throughout these schools there is a want of intelligent, concentrated, continued work. For this there is no single remedy; but one of the most important is closer and better supervision. Directors do faithful work, devoting no small amount of time gratuitously to school meetings; but few of them would claim ability to supervise schools as to methods. If there is no complaint the school is successful. In large counties the county superintendent can, with his other duties, visit the school but once a year. Where the teacher is to be trained and her methods radically changed he can do but little. The need of district supervision has long been felt in Pennsylvania. The law of 1885 provided for superintendents in cities, boroughs, and townships having over five thousand inhabitants. But the law was a blunder: for not one township in a hundred has a population of five thousand. Create in each township having not less than ten schools, or in two or more adjoining towns having not less than ten or more than twenty schools, a principalship to be filled under the same provisions as borough principalships.

On the following day a resolution was passed asking the State superintendent to use his influence in securing legislation for establishing throughout the State a district superintendency subordinate to county supervision. Other resolutions were also passed emphasizing the importance of temperance as a study in the public schools; favoring free text-books; commending the recent action of the Legislature in fixing the minimum school term at six months; for increasing the State appropriation, and for paying teachers while attending institutes; denominating the normal schools as an essential feature of the school system; favoring a closer union of the public schools and higher institutions of learning; and finally welcoming the present agitation of the subject of manual and industrial training as well calculated to secure consideration of the practical ends of education.

On January 26, 1888, the city and borough superintendents east of the Alleghenies met at Lancaster. Five topics were discussed: Examination of schools, Qualifications for transfers, Intellectual growth of teachers, Teachers' meetings and institutes, and High school commencements. We regret that we can only speak of the second and third topics, which are especially appropriate to this chapter. Superintendent Gotwals thought that teachers did not read enough either professionally or generally; Superintendent Ballentine, that increased professional knowledge was closely connected with in-

crease of salary; a view concurred in by Superintendent Shelly. Superintendents Hoffman, Harpel, and Buehrle said the teachers under them were following a course of professional reading. Superintendent Shelly holds two meetings each month two hours long in the evening. A normal class, consisting of those learning to teach and those who have had less than five years' experience in teaching, meets twice a month. Superintendent Ballentine calls special meetings when necessary; Superintendent Gotwals holds semi-monthly Saturday meetings of teachers of different grades; Superintendent Harpel reported meetings of teachers and directors.

On the 10th of April, 1888, the county, city, and borough superintendents met at Harrisburg. The attendance was made up of fifty-one county and thirty-five city or borough superintendents, and five normal school professors.

Superintendent Wolf, in addressing the convention on "Institutes and their General Management," said that institutes were valuable as causing the association of teachers, fostering a professional spirit, inculcating professional knowledge, affording an opportunity to hear the keen, pointed address of experienced educators, serving to awaken public interest, and finally, as the best means of communication between the several executive branches of the system. A committee having been appointed to report on the best time for holding the institute, it was recommended that no institutes be held during the last week in December, known as "holiday week;" that in counties having the longer average term the institutes be held as soon after the opening of the term as possible; that all superintendents be requested to decide on the time of holding their institutes as early in the school year as practicable, and at once report the date to the superintendent of public instruction.

The percentage and statistics of attendance received attention. The State superintendent was requested to prepare a definite rule governing the matter of obtaining a percentage of attendance, which caused Dr. Higbee to remark: "After the rule is made how are we to prevent some from reporting 125 per cent?" and Superintendent Patterson to say that the present instructions are plain enough for those who are willing to follow them.

Dr. Buehrle offered a resolution that free-hand drawing be included among the branches required to obtain a teachers' certificate, as well as among the branches of study in every school district. This was proposed to obtain legislation, and if industrial education is to be introduced, this was the place to begin. After amending the resolution by omitting the word free-hand the resolution was adopted. Superintendent Shelly spoke on the "Selection and Transfer of Teachers," and Superintendent McNeal on the "Examination and Qualification of Teachers."

Dr. Wickersham, having been invited to address the convention, recalled the first meeting of the Pennsylvania superintendents thirty-four years ago in the very hall in which his hearers were then seated. "I well remember," he said, "that peculiar body of men, most of whom have gone to their long homes. When those first superintendents were elected few of them had any definite knowledge of what they were to do, and some counties elected them to do nothing. McKean County fixed the salary at \$250, and it cost the superintendent one-half of it to come to the meeting, and that was the earnest of the years of faithful work that followed. Berks made the salary \$250, expecting the officer to resign; he did not, but came here, went home and served his term faithfully. The superintendent of Somerset, if I am rightly informed, walked all the way from his county to Harrisburg to attend the convention and back home again, being unable to pay his fare on the railroad. * * * What the body lacked in educational knowledge it made up in zeal, and to that small body of men this Commonwealth of Pennsylvania owes a debt of gratitude that can never be paid. * * * I was a member of that convention, and have been in all but one or two since. * * * And while I know, and am glad to know, that the least of you may be in advance of the best men of that day, I hope you will not forget that they were as willing to work and to make sacrifice, perhaps more so, than any who have followed them."

In the November number of the Pennsylvania School Journal the action of the school directors of Schuylkill County, in forming a "directors' association," is the occasion for the editor's inquiry, "Why not organize similar associations of school directors in all the counties of the State?"

At the twentieth annual session of the Wayne County Teachers' Institute, held at Honesdale, January 2-6, 1888, Principal Twitmyer, in speaking of the cause of poor schools, said they were due to (1) the poor building, (2) the constant change of teachers, (3) short terms, (4) irregular terms, (5) poor classification, (6) inadequate supervision, and (7) indifference on the part of the community. On the part of the teachers the cause was due to (1) insufficient education, (2) lack of professional training, (3) want of judgment, and (4) want of enthusiasm; and to rectify these last evils as far as possible was the object of the institute.

RHODE ISLAND.

Johnston.—"Important as buildings, apparatus, books, and the prompt attendance of the pupils are, the motive power in the school is the teacher," says the superintendent. "To secure such teachers two things are necessary: First, to demand the qualifications which are essential in the competent teacher; and, second, to offer the compensation which corresponds to ability of that class. * * * No one, however, ought to attempt to teach, and I think no one ought to be authorized to take charge of a school who has not made the work of teaching the subject of special, careful, and thorough study; if not in a normal school, then by extensive and wisely chosen reading, by visiting schools, by listening to discussions of educational questions, and in whatever way insight into the science and art of teaching can be obtained."

Newport.—The city superintendent continues his appeal for a training school for teachers, considering it "as the principal educational question before us." He asks the board to consider the question in view of the probability that the vacancies occurring in the corps will have to be filled by promising, yet untrained, young lady residents. The present plan of employing assistant teachers is a good one, so far as it goes, but vastly inferior to the training school, which could be established without an increased expenditure.

As to the work which would be attempted in the training school, it would be the duty of the principal to give daily, out of school hours, say at 11.30 A. M., to her pupil teachers a lesson upon the principles and methods of teaching, such as are given at the State normal school, the class being required to make diligent study of the subjects. These lessons would include, among other things, an exemplification of the best ways to teach the common school studies, making constant reference to a pedagogical library, which should be established. In school hours it would be the duty of the principal to instruct the children of the four rooms in succession, requiring the pupil teachers to observe, and afterwards to repeat and continue the lessons.

No person should be admitted who had not received an academic education, and any admitted that gave little promise of success should be advised to withdraw. After a service of twelve or eighteen months a diploma of graduation should be given.

Of the fifteen or sixteen teachers appointed to teachers' positions in the city schools during the last six years but five or six had followed a normal school course. The schools of Newport, says the superintendent, must inevitably lose their creditable standing unless they shall be governed by a recognition of the principle that obtains in professions other than teaching.

Pawtucket.—"Referring to your circular," says Superintendent Sherman, "asking information about our 'Normal' schools, etc., I have to say that our Training School, so called, is only an attempt, on a small scale, with the means at our disposal, to do the best we can in this matter as a beginning. It is not large enough, complete enough, sufficiently systematized, nor well enough established, for us to make any claims, or look for any results as bases of opinion as to its merits as yet. Of course we hope it will prove a success, and mean to make it better as fast as possible."

Teachers' meetings.—The meeting of teachers held at Cranston, in February, was sufficient to prove, says the school committee, that they are a great help to the teachers. It is hoped that at least three will be held during the year 1888-89.

The forty-third annual meeting of the Rhode Island Institute of Instruction was held at Providence, in October, 1887. We have no report of the proceedings. The Barnard Club, of Providence, has opened its membership to teachers from other parts of the State.

SOUTH CAROLINA.

In his report for 1888 the State superintendent thus speaks of the normal school and institute work of this State.

Normal schools.—"The Legislature established a normal college for males within the South Carolina University. The trustees placed at its head Dr. E. E. Sheib, a gentleman of liberal culture, who came to us from similar work in the College of Louisiana. He has already made an auspicious beginning in institute work at Orangeburg, where he was given a most hearty welcome. He is aided by an able faculty, and those who attend his classes will have exceptional facilities for acquiring the most improved methods. By a happy arrangement with the trustees of the Winthrop Training School, the students of both institutions have the privilege of attendance upon the lectures of both colleges and the practice classes of the latter.

"The Winthrop Training School for Females was established two years ago. It was founded by Superintendent D. B. Johnson, with slender means, and seemed as frail a bark as the Mayflower of the Pilgrim Fathers. To the timid it promised nothing but disaster to mariners and crew. Under the skilful and practised hand of its president, it has weathered the storm.

* * * * *

"Two classes have been graduated from this institution, and, without exception, are employed in positions of usefulness. The State gave to each county a free scholarship, which was filled during the summer by competitive examination. The institution opened under the best auspices, with fifty-one students in attendance. There were over one hundred applicants for the scholarships. The money for these beneficiary pupils is paid out only on my order, after the certificate of Superintendent Johnson is presented.

"This movement is rich in promise alike to the State and to these young ladies. We secure trained talent for the schools, and they have the means of an honorable living. This is the first dollar South Carolina has given to educate her daughters, and it has been most worthily bestowed. The standard for admission, now good, will be gradually raised, and the most progressive and modern methods of teaching will be presented here. Superintendent Johnson is ably and faithfully seconded by his faculty.

"In behalf of the women of the State this school demands active and intelligent support. It is proper to say that this effort was made possible by the liberality of the Peabody trustees, through their accomplished secretary, Dr. S. A. Green. The name was given in honor of the Hon. Robert C. Winthrop, the patriot and scholar, whose interest in its success has in various ways been manifested. Institutions for normal training are now a part of the ordinary educational machinery, and need no vindication. They are to the teacher what the moot court is to the attorney, the dissecting room to the physician, the studio to the artist. They present the most matured views of the most successful teachers. The student, it is presumed, has gathered the knowledge of books, and in these training grounds he finds out the readiest means to impart information. It is presumed that the State has only begun this work. Modifications may and will be needed in the plans of operation and in the methods of assistance. She can never retrace her steps.

Institutes.—Sixteen county normal institutes have been held in the State during the year. In Greenville were gathered two hundred and fifty teachers. For two weeks instruction was daily imparted by a large faculty. In Orangeburg the attendance was large, and, daily, numbers of citizens assembled to hear the instructions of the very able faculty in charge. One unusual and very interesting feature was the "Trustees' Day." By active effort School Commissioner Mellichamp secured the attendance of about sixty trustees, and I had the pleasure of addressing them on the subject of their relation to the work of common schools. It was, indeed, a great source of gratification to see such a gathering of representative men from all parts of the county, who gave their time and energies to the public service without pecuniary reward. The reports from the other counties show a large attendance and a great amount of good done by these annual gatherings of the teachers. The amount of money allowed by the State from the county school fund is handsomely supplemented by the trustees of the Peabody Fund. I am sure no other agency and no equal amount of money spent does more good. It is the only aid for the teachers in the field. They need this help, they desire it, and they use it for the best purpose. The only change I suggest is that the institutes should be under some one general direction, and the faculty and work selected by this agency. One week's faithful labor will kindle enthusiasm, weld into a common purpose the varying plans of separated teachers, direct into one channel the divided forces of distant sections, and impart what is valuable in new methods to old teachers."

Florence.—The graded school of this town has a normal department connected with the high school. Its object is to prepare teachers. The pupils are taught: (1) A knowledge of the common school studies and the best methods of teaching them; (2) psychology and its application to teaching; (3) school management. During the whole course special attention is paid to class methods, the art of questioning, kindergarten methods, methods of teaching elementary branches, and methods of teaching the higher branches. There were five pupils in the senior class and ten in the junior.

Teachers' meeting.—The annual convention of the association was held July 11, 1883, at Columbia. The State superintendent addressed the assemblage on the merits and defects of the State school law. The subjects of History, English, and the Bible in our schools were presented and discussed. Miss Bonham, of the Winthrop Training School, urged the necessity of reading school journals and books on education as (1) stimulating; (2) as arousing professional pride; and (3) as a means of getting new ideas. Mr. Clinkscapes said the great obstacles to the success of the State school system were want of money and competent county supervision. County commissioners should be appointed, not elected. Miss Martin, in speaking of Moral Training in the Schools, said the foundation should be laid at home, and that public exhibitions and prize-giving are pernicious, because they foster a love of display. In discussing the question, "What Constitutes a Model [ideal] School," Mr. Baird said that the schools had been too long used by young college graduates as stepping-stones to other professions. Mr. Curtiss said the object of an institute was to instruct the non-professionally trained teachers, and that institutes should be conducted by skilled persons. Superintendent Greenville, in speaking of

teaching as distinguished from cramming, said that it was the art of causing to know. It was a profession, and the school room should be no longer an asylum for briefless lawyers, preachers without churches, and doctors without patients. Miss McCants spoke of the "Professional Qualifications of the Teacher." A good teacher, it has been said, is possessed of three qualities: knowledge, patience, and sympathy. The speaker would add a fourth, discipline.

During the session the chairman of the committee on membership stated that of the 3,000 teachers in the State but 110 are members of the association. Among the several resolutions passed was one expressing the gratification of the meeting at the action of the last Legislature in recognizing it to be the duty of the State, to herself and her children, to provide professional training for the future teachers of the public schools, as shown by the provision for the professional training of young men at the university and of young women, by means of county scholarships, at the Winthrop Training School. Some advance was made in the matter of arranging for a permanent place of meeting.

TENNESSEE.

The Peabody Normal College, late State Normal School, has been referred to in the foregoing. It only remains to notice the other State agencies for the training of teachers; and first—

Institutes.—These for the last year have been very successful, says the State superintendent, and are doing much to improve the country school teachers, but few of whom have been professionally trained. Twenty-three Peabody Fund institutes were held, seventeen for white and six for colored teachers. They each, as a rule, continued in session for one week, but in some instances two, and even three. Besides these a majority of the counties of the State each held a local meeting of the kind.

Teachers' meeting.—The twenty-fourth annual session of the Tennessee State Teachers' Association met at Cleveland, on August 7, 1888. The manner of proceeding of the association being to refer subjects of special importance to a committee for report, as is done in legislative assemblies, our attention is naturally drawn to the expressions of opinion of these committees. The Committee on Pedagogy reported that to secure the professional training of teachers the requisite is normal instruction, which should be imparted, first, through normal schools or colleges; second, through teachers' institutes or summer normals; and, third, by prominent schools and colleges instituting a chair of pedagogy; that this instruction should be given at State expense; that skill is fostered by State and county supervision; that books and journals, associations and reading circles are an educational necessity; that a monthly outline of "pedagogical" study should be prepared, which county associations should make a prominent feature of their work; and that a column of the county newspaper should be secured for discussion of the county school affairs.

The Committee on Teachers' Institutes made a report providing for State and county institutes. The Committee on Literature reported in favor of the topical method, with the text-book as a book of reference; that the institution should begin on the lower grades and with American literature, and then English, closing with American. "We discussed the reason," the committee says, "why literature should be considered a prominent branch of school work, and came to the conclusion that for the development of the thinking power of the student and for the formation of a habit of accuracy it could hardly be excelled."

The report of the Committee on the Work of County Superintendents endorsed the work of that office, pointing out its well known usefulness when properly filled. The Committee on Primary Work in its report advocated among other matters that the child be put to writing the first day it enters school. "Do not waste time on the alphabet; teach words." The Committee on Manual Training endorsed that subject as education and recommended that it be a permissible study of the common school course. The Committee on School Supervision distributed that subject into four categories, State, county, city, and by principals. Only the last of these calls for particular attention. Assuming other qualifications, the principal should be familiar with the course of instruction, that he may be able to properly assign any pupil on entrance. To do this there must be a system of grades, observation of class-work, and exemption of the principal from class-work, say, for one-third of the day.

TEXAS.

In treating of the normal schools of the State, the State superintendent speaks of the Sam Houston Normal Institute as a powerful factor in the improvement of the school system, and of the inadequacy of its building to accommodate the rapidly increasing number who attend. A building worthy of its importance and usefulness is asked. But there is a demand for another school of the kind caused by the size of the State and

the necessity of having more teachers. The Prairie View Normal Institute, the outcome of a failure to establish a branch agricultural and mechanical college for the colored people, is reported to be in a prosperous condition. Manual training has recently been introduced. The school is still under the control of the directors of the Agricultural and Mechanical College. A chair of pedagogy should be established in the State university, for there should be some institution in the State capable of preparing high school teachers and scholarly city and county superintendents.

Institutes.—The State superintendent, in speaking of these, says that as the normal schools affect directly but a small portion of the work of the schools, scarcely a ninth of the schools being taught by teachers who have enjoyed the benefits of a normal school, the professional improvement of the other teachers must come through the institutes. Yet as only one-third of the counties hold institutes, measures must be taken to introduce them more generally. The attendance of teachers should be made mandatory, their pay continuing, and three or four experts should be sent to the several counties to organize and conduct institutes for one week each year. As an aid to institute work a programme of exercises for six institute meetings, to be held in the months from January to June, inclusive, was sent out by the superintendent, and if followed will improve the institutes generally. But the difficulties in the way of the institutes are so great under the present law that little hope can be entertained of their general success until it is amended in the particulars above suggested.

Teachers' certificates.—Still using the report of the State superintendent, we find that as an aid and guide to the boards of examiners, complete sets of examination questions have from time to time been sent out, with complete instructions as to the manner of conducting the examination, a plan that has given satisfaction and might be well embodied in the statutes. These examinations, however, only test one side of the teachers' qualifications; the final test is the work in the school room, but for this the law makes no provision; county superintendency should be mandatory, not optional. The requirements for teachers' certificates should be raised, especially those for the second and third grades, and no person ignorant of the theory and practice of teaching should be authorized by the State to teach a public school. A higher grade of certificate than the first should be instituted, relieving men and women of undoubted ability from the annoyance, and sometimes humiliation, of repeated examinations by men in every way inferior to them in knowledge and skill.

Teachers' meetings.—The annual session of State Teachers' Association was held June 26, 1883. The president, in his address, spoke of the various influences and qualifications not of a pedagogical nature which often avail more than professional knowledge in the selection of a teacher. He criticised the want of zeal in teachers in failing to join the association, remarking that of the ten thousand teachers in the State only two hundred were present, and that there were teachers in their State that did not know that they had an association. Of the several papers on "Enthusiasm," "Conversation," the "Public School System of Texas," and others, the Office has no full account.

The public school superintendents of North Texas met at Dallas, October 29, 1887. We have no record of the proceedings.

VERMONT.

At the normal school at Castleton the standard for admission has been steadily raised, being now 75 per cent., while for advancement from class to class in course the percentage required is 80. This has resulted in a corresponding advance in the age of the pupils attending the school, the recent graduating class averaging twenty-one years. In the last seven years the first course of study has been lengthened from one to two years, and from it have been graduated one hundred and thirty-one pupils. The second course has been lengthened from one to one and a half years, and from it have been graduated twenty-four.

At the normal school at Randolph ten weeks were recently added to the time for the study of pedagogical subjects and ten more are to be added during the coming year, so that now for seventy of the eighty weeks of the course a study of the principles is one of the four main lines of work. But the study of education, says Principal Conant, from whom we have quoted the foregoing facts in regard to this school, should extend through the entire course, and more time is needed for the study of natural science.

We can not do better in closing these brief remarks on Vermont normal schools than by quoting from Principal Leavenworth's report to the State superintendent: "The normal schools of the State are meeting and supplying the demand for better equipped teachers. Many attend for a part of the course, and then engage in teaching. So great is the demand for their services it is difficult oftentimes for them to get away from their schools so as to return and complete the course. For the amount of the assistance received from the State, it is gratifying that the normal schools have been able to do so

much. The best training in methods I conceive to be the most thorough instruction in the branches to be taught, and the uniform success of our graduates seem to fully warrant this conception."

Teachers' meeting.—The annual session of the Vermont State Teachers' Association was held at Brandon, January 26, 1888. Mr. Hume, of Boston, spoke of the tendency to teach too many things. Right thinking and right acting should be the real fruits of education. Miss Wells, of the Castleton school, in her article on "English Grammar," thought that pupils should be led to see that grammar in books is the same as grammar in ordinary life. Mrs. Dewey, in her paper on "Morals and Manners," thought that incidental teaching of morals in the school of more value than formal instruction. The teacher should be an object lesson on the subject. In Miss Lowry's paper on "Books and Schools," it was said that it was quite as essential to teach children what to read as to teach them to read; and to do this the teacher must be capable of judging as to the value of a book. Principal Conant, of the Randolph Normal School, spoke of the need of more teachers' associations in the State. The association of one teacher with one book of acknowledged excellence in teaching and then with another book, is also one of the teachers' associations that should be multiplied *ad libitum*. Principal Dutcher urged that American history and literature should be studied by American pupils. Civil polity should also be taught in the high school. Professor Yager, of Middlebury College, delivered an address on "Missing Links in Education." Legislation will not supply the place of ability to manage. In most cases there has been an abundance of stimulus resulting in attempting too much and mastering too little. Discipline is of much more consequence than scientific information. The fundamental studies should be kept fundamental. The natural method which has constantly in view the essentials, should be employed, thus imparting intelligence to the pupil without making him especially learned. But the link most generally missing is the educational spirit, which can only be begotten by a better conception of what education means.

The association passed a resolution before adjourning expressing their pleasure at the appointment of a commission to study the school system and to remedy defects, should they be found, and recommending that the duty on foreign educational books be removed.

VIRGINIA.

By the act approved March 5, 1888, the College of William and Mary¹ became a normal college. The first session began on the 4th of October, 1888. Each county and city in the State is entitled to one pupil, who is to be nominated by the county or city superintendent, and instructed without charge to him, while his living expenses are not to cost him more than ten dollars a month. The number entitled to admission is 115, and the annual cost to each \$90. Such pupils are to give satisfactory assurance of their intention and willingness to teach in the public schools of the State for at least two years.

The admission requirements are reasonable proficiency in the studies of the common schools, some of which will be reviewed in the college with special reference to illustrating and exemplifying the best methods of teaching them. The course of study is in (1) English and history; (2) mathematics; (3) Latin and Greek, French and German; (4) natural sciences; (5) moral sciences; (6) pedagogics. The organization was effected on the 5th and 6th of July, 1888, by the election of a faculty.

Institutes.—Eight Peabody and eight county institutes were held during the year. The Peabody institutes continued through four weeks with one exception, when the session was double that term. The attendance of white teachers on the five for them was 940, and of the colored teachers on the others 294; in all 1,234. The attendance at the county institutes was 322, the time of session varying from two to eight weeks. To these figures should be added the 131 teachers attending the institute of five weeks, held at the Virginia Normal and Collegiate Institute, and the 49 teachers enrolled at the institute of four weeks, held at Hampton.

We take the following notes on these meetings from the article by the State superintendent in the Educational Journal of Virginia: "While it is not now intended to foreshadow the policy touching institute work for the next year, it is but just to say that the policy adopted this year is abundantly indicated by the results attained. * * * As a general remark it can be justly said that the work was worthy of high commendation. In some of the institutes the teachers met at the first hour in general assembly for religious exercises and general lectures. Thereupon they were distributed into two or three classes or sections, occupying separate rooms, and instruction given on the class plan. * * * There is one point in this connection to which especial attention is

¹The vicissitudes of this college, the second to be established in the land, are given in Circular No. 1, 1887. To be had on application to this Bureau.

called, and that is that a good many teachers are late in entering the institutes and many of them drop out before they close. * * * An institute is a school. Therefore those who attend it ought to be present when it opens and remain till it closes if they would secure the full benefits of the course of instruction given."

Teachers' meetings.—The sixth annual conference of the county and city superintendents was held at Richmond, November, 13, 14, and 15, 1888. Dr. Curry, agent of the Peabody Fund, said he was glad to hear the State superintendents speak of the free schools as an *established* system. He could remember when every step in the progress of the work had to be fought for. No people had ever been educated except by the State. The right and duty of the State to educate is based on the law of self-preservation. The perpetuity and the very existence of the nation is dependent on the education of the people, and to secure this important end the State has a right to proceed by taxation. Beyond this no such right exists. The first subject of discussion was "Teachers' Salaries as Dependent on the Average Attendance of Pupils." The committee appointed to report on this subject recommended that a circular, giving the rules and regulations regarding discipline, lack of text-books, and sparsely-settled districts, be issued; that all issues arising under these laws are to be decided by the county superintendent; that the county superintendent draw his receipt for the teachers' monthly report according to the actual enrolment and average daily attendance, and that the salary be for such sum as he may think the law justifies; and, finally, that the laws are not intended to work hardships to the teachers, but to secure faithfulness and efficiency and prevent the multiplication of small schools. An amendment requiring the teacher to report the number of children not attending school and the reasons was lost, and the resolution adopted.

The committee to which was referred the topic of "Examination of teachers—what changes are needed in existing laws and regulations," reported that the State superintendent should urge the Legislature to legislate upon this subject; that a diploma from a Virginia State normal school or the Peabody College at Nashville should constitute the holder a qualified teacher; that a State certificate be instituted; and, finally, that county superintendents should not be required to hold examinations in a district upon demand of its school trustees.

The committee on "Normal institutes—how can they be improved?" reported that (1) a well-graded course of instruction covering at least three years should be established, and (2) the appropriation should be increased.

WEST VIRGINIA.

The State superintendent writes to the agent of the Peabody Fund, as follows:

"Our normal schools are making commendable progress, and are doing a great work for our public schools. I will give the enrolment of the six schools for the past four years, that you may see how encouraging is the increased attendance: The total enrolment for 1885 was 687; for 1886 it was 727; for 1887 it was 766; for 1888 it was 890. The number of graduates for 1888 was 47.

"I have taken a special pride and interest in doing all in my power to promote the efficiency of these schools, and feel confident they are in better condition than at any other period of their history. Yet I am frank to state that on account of limited appropriations for their support their usefulness has been very much hampered. With larger and better trained corps of teachers, and better library facilities, and more apparatus, their usefulness would be greatly increased. Those advantages can, however, only be secured with larger appropriations than they now receive."

Institutes.—The teachers' institutes have also increased in attendance and efficiency, and the superintendent continues: "The enrolment for 1887 for the term of five days was 6,301, being about 1,200 more than the number of teachers employed in all the schools of the State. The reports from forty-seven counties for this year [1888] have been received, showing an enrolment of 5,451.

"A very successful normal institute for a term of four weeks was conducted at the State University at Morgantown, beginning the 18th of last June. This institute was under the auspices of the faculty of the university, and the success was such as to warrant a permanent organization for an annual institute of six weeks at this institution. I hope to see next year similar institutes established at two of our normal schools.

"It is not necessary that I should comment upon the service the institute has done in the improvement of our teachers, the advancement of our schools, and the elevation of public sentiment. It has been an invaluable factor, and upon its continuation we must largely depend in the future for the training of a large number of our teachers and the education of a more favorable public sentiment for popular education."

For the meeting of the State Teachers' Association see under Maryland.

WISCONSIN.

At the meeting of the board of regents of the normal schools of Wisconsin, at Madison, June 25-27, 1888, several important measures were adopted. One of these was the adoption of a report submitted by a committee of the board as a plan for unifying the conditions of admission to normal schools and to extend the influences of the examinations. By this a committee composed of two members of the board and the presidents of the normal schools is to prepare examination papers and direct local examinations for admission to the State normal schools. These local examinations are to be held twice a year in such counties as apply through their county superintendent, and are to occur simultaneously in the several localities. The papers made are to be sent to the president of a normal school, and are to be examined and ranked by the teachers of the school. The secretary of the board is to be informed of the results, and will issue certificates to all successful candidates. It was also provided that graduates of the three years' normal course of the Milwaukee high school, and of an advanced course of one year in the same high school, may be admitted to the normal school of Milwaukee and be credited with the equivalent of one year's work therein.

The presidents of the several normal schools, through President Albee, presented two reports to the board upon matter referred to them, the first of which is as follows:

"In compliance with the direction of your board, in resolution prescribing a professional course of one year for normal schools, the undersigned submit the following course and suggestions for your consideration:

"(1) That the conditions for admission to such course be the same as provided in said resolution, namely, examination upon all branches required by law for a first-grade county certificate, and proof of three years' successful experience in teaching.

"(2) The course of training shall consist of:

"(a) A course of ten weeks in review and methods upon each of the following-named branches: Reading, arithmetic, geography, grammar, writing, and physiology (especially in the hygienic effects of stimulants and narcotics).

"(b) A special course of twenty weeks in school management, as related to organization, discipline, classification, courses of study, and school law.

"(c) A course of twenty weeks in theory and art of teaching, supplemented by twenty weeks of class teaching in school of practice.

"(d) A course of twenty weeks in drawing, and at least ten weeks in composition.

"(e) A course of twenty weeks in psychology, which shall 'clearly include' an examination of the nature and classification of the mental faculties, their laws, and methods best adapted to their development."

The second report is to the following effect:

"In response to your resolution of February 2, 1888, directing us to report 'what revision of professional instruction in the advanced course is necessary, if any, in view of the action of the board at the present meeting,' we would submit as follows:

"(1) That it does not appear to us that any material change is demanded, the professional instruction in the advanced course being already properly coordinated with that of the elementary course, which most of our students will still find it necessary to pursue; but

"(2) That we would request of the board such an interpretation, or modification, of the resolutions relating to high school graduates as will permit the substitution of reviews in the common branches with methods, theory of teaching, and practice work, in place of those studies of the advanced course in which the student is found to be proficient."

These reports were adopted.

Institutes.—At this meeting of the board of normal school regents, Regent Thayer, for the committee on institutes, presented the following report:

"During the year closing with this date eighty-four institutes have been held under the direction of your committee, in sixty different counties and superintendent districts. Fifty-three of these were held in the summer and fall of 1887, and thirty-one in the spring of 1888. Of the former, twenty-nine were in session one week, twenty were in session two weeks, one was in session four weeks, one was in session three days, and two were in session two days. Of the latter, twenty-two were in session one week, four were in session two weeks, one was in session three days, and four were in session two days, making a total of one hundred and six and three-fifths weeks. The short-term institutes were held for the benefit of graded school teachers, by request of city superintendents and principals of high schools, at the following places: Ashland, Boaz, Eau Claire, Fond du Lac, Menomonie, Neenah and Menasha, Racine, and Waukesha. In each of the counties of Fond du Lac, Richland, and Sauk three institutes were held. In both the first and second districts of Dane and in each of the counties of Barron, Bur-

nett, Clark, Dodge, Dunn, Eau Claire, Green, Kewaunee, Marquette, Price, Racine, St. Croix, Trempealeau, Vernon, Waukesha, and Winnebago two institutes were held.

"Comparing these statements with the report of the preceding year, it will be seen that seven more institutes were held; two more counties and superintendent districts are included, and thirteen weeks' more time was covered this year than the year preceding.

"Besides the five regular conductors, forty-five assistants were employed.

"The total expenditures have been classified as follows:

Salaries of conductors.....	\$4,601.50
Expenses of conductors.....	1,840.87
Printing.....	169.00
Incidental expenses.....	301.44
Total	6,912.81

"In all the institutes held there were enrolled 1,497 males and 5,143 females, a total of 6,640, or 707 more than the number reported last year.

"In the following counties no institutes were held during the year: Bayfield, Douglas, Florence, Forest, Monroe, Oneida, Portage, Sawyer, Washburn, and Waushara. In these counties, according to the last annual reports, there were 376 schools.

* * * * *

"The committee respectfully submit the following resolution, and recommend the adoption of the same by the board:

"*Resolved*, That the sum of \$5,000 be, and the same is hereby, appropriated, out of the normal school fund income, or so much thereof as may be necessary for that purpose, to defray the expenses of teachers' institutes for the ensuing year, accounts for which may be audited, allowed, and paid by order of the committee on institutes, including the expenses of supervision, which shall be allowed at the same rates heretofore allowed."

At Oshkosh, teachers' meetings have been held once a month during the year, during which the subjects relating to school work were discussed. "Inasmuch as our teachers," says the superintendent, "have never had any special training for the work in which they are engaged, and as the very best instructors must constantly study to retain their superiority, I would suggest that the teachers' meetings be converted into teachers' study classes, and that there be four of them—primary, intermediate, grammar, and high school. In these classes systematic courses of professional reading could be carried on. The philosophy and the history of education should be learned thoroughly. Familiarity with the methods of most successful teachers should be acquired. A prolonged study of mental science should be made."

Teachers' meetings.—The winter session of the Wisconsin State Teachers' Association was held at Madison, December 27, 28, 29, 1887.

The proceedings began with an address entitled, "The Value of Music as an Educational Factor," by Mr. Holt, the supervisor of music at Boston, Mass. Mr. Holt said that any knowledge he had of how to teach music had come to him through teaching the common branches. Good pupils in music can never be made by the method of constant repetition; for expression in music must come from appreciation of the sentiment to be conveyed, not from mechanical perfection. The human voice is the only instrument capable of teaching expression. Not all teachers should be expected to teach music, but only those especially fitted for such work. To teach music it is necessary to understand the laws of the human mind, and the major scale is a sufficient basis for the work.

In presenting the report of the committee on "Elimination of Unprofitable Work from the Curriculum of Graded Schools," Principal Sprague stated that utility, discipline, and culture are the criteria. The usual language books are diluted grammars; the reading lesson should be the basis of language work, technical grammar being retained only so far as it helps logical analysis. The value of geography is questionable, since it is so ephemeral as information. A map of the school ground should be the introduction to map-drawing. Only the central fact of historical, political, and commercial geography should be selected, but these should be thoroughly mastered; the productions of the soil of a whole region should be studied; there should be an abundance of reading material; and, finally, physical geography should follow a course in science. As to arithmetic the objects sought are accuracy and quickness, which the study of natural science can furnish as well as arithmetic. The subject of mensuration and the extensions of percentage should be omitted. During the first year much drill should be had on the nine digits; during the second fractions and measurements (tables of weights and measures) should be taught, and by the end of the third year multiplication and division up to the nines should be firmly fixed.

Professor Smith, of Beloit College, treated the subject of mathematics under two heads—defects and causes. In arithmetic pupils are generally deficient in accuracy and rapidity, the answer not the principle being the chief end. In algebra pupils are deficient in factoring, radicals, and exponents. In geometry pupils are well prepared on demonstration, but lack power to apply principles to original work; demonstrations are not clear, neat, or accurate. The cause lies in the abstract nature of mathematics and faulty textbooks; in algebra quadrates and radicals being poorly represented, in geometry too much being done and not enough suggested in outline to be done in full, in arithmetic percentage is not dwelt on sufficiently. Arithmetic and elementary algebra and geometry should be presented in one book.

State Superintendent Thayer spoke of the interconnection that should subsist between the university and the public secondary, normal, and elementary schools. Normal schools have a specific purpose, the training of teachers and not the imparting elementary knowledge, and their requirements for admission should be clearly defined and rigidly adhered to. Not enough stress is laid upon the theory and art of teaching at the institutes, which is their proper object. In the future the institute must reach a larger number of teachers, and interest in them, by public addresses or otherwise, must be aroused. Professor Maxons, in speaking of the institute problem, said that the institute had two objects: (1) To stimulate the teachers; (2) to do some academic work. For the attainment of the first end probably two days are sufficient, and the best means of occupying them is by lectures. Assistant Superintendent Chandler said that institute work seemed to be losing its hold on the public and blamed the county superintendents for this. The evil might be rectified by requiring regular attendance as a qualification for obtaining a certificate.

The summer session was held at Eau Claire, July 3, 1888. The president, in his address, said that one of the reasons for failure in educational work is unqualified teachers, which is occasioned by the general unwillingness to pay a fair price for teaching. In the discussion of several papers on the study of history and of patriotism, Dr. Stearns stated that of the 350,000 pupils in the State only 8,000 enter the high school, and any knowledge of history that it is desired to give them in the schools must be given in the grammar grades. He would suggest that after the fourth reader a history like Higginson's History of the United States be read. In treating of school libraries, how to get and how to use them, it was stated that teachers must be depended on to take the lead in securing good reading, for parents are indifferent.

TABLE 32.—Statistics of Public Normal Schools for 1887-88.—PART I.

	Post-Office Address.	Name.	Year of Opening.	Principal or President.	Instructors.		Pupils Enrolled.		Pupils below High-School Grade.		Pupils in Teachers' Training Course.				In Practice School.
					Male.	Female.	Male.	Female.	Male.	Female.	Enrolled.	Average Attendance.	Male.	Female.	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Birmingham, Ala.....	Training Class.....	1886	James K. Powers.....	1	0	0	9	0	0	0	9	0	5	53
2	Florence, Ala.....	State Normal School.....	1873	W. H. Council.....	5	3	81	79	0	0	81	79	63	63	53
3	Huntsville, Ala.....	State Normal and Industrial School.....	1875	Carleton B. Gibson.....	4	4	10	(302)	(57)	0	10	27	0	0	100
4	Jacksonville, Ala.....	State Normal School.....	1883	James W. A. Wright, Miss.....	1	10	0	27	0	30	0	44	0	40	100
5	Livingstone, Ala.....	Alabama Normal College for Girls.....	1883	Julia S. Tutwiler.....	6	1	57	63	20	18	39	43	34	40	10
6	Troy, Ala.....	State Normal School.....	1887	E. R. Eldridge.....	12	11	219	175	0	0	0	0	(250)	0	10
7	Tuskegee, Ala.....	Tuskegee State Normal and Industrial School.....	1887	B. T. Washington.....	1	0	12	18	4	6	12	18	9	10	10
8	Tempe, Ariz.....	The Territorial Normal School.....	1886	Robert L. Long.....	4	2	176	200	152	147	152	42	0	0	30
9	Helena, Ark.....	Southland College and Normal Institute.....	1864	C. W. Osborn.....	2	1	152	42	0	0	152	42	0	0	30
10	Pine Bluff, Ark.....	Branch Normal College of Arkansas Industrial University.....	1876	J. C. Corbin.....	4	5	30	249	0	0	30	249	0	0	211
11	Chico, Cal.....	State Normal School.....	1882	Ira More.....	1	1	0	101	0	0	0	101	0	96	195
12	Los Angeles, Cal.....	State Normal School.....	1876	John Swett.....	7	15	70	527	0	0	70	527	2	223	400
13	San Francisco, Cal.....	Normal Department of Girls' High School.....	1881	Charles H. Allen.....	2	13	5	345	0	0	5	345	0	0	513
14	San José, Cal.....	State Normal School.....	1882	C. F. Carroll.....	0	2	0	26	0	0	0	26	0	23	513
15	New Britain, Conn.....	Connecticut Normal and Training School.....	1869	Maria L. Breen.....	1	8	0	35	0	0	0	35	0	25	750
16	New Haven, Conn.....	Cedar Street Training School.....	1884	M. Virginia Fogle.....	4	4	5	64	110	30	64	110	0	0	41
17	New Haven, Conn.....	Welch Training School.....	1883	William F. Gorrie.....	2	8	42	68	0	0	25	47	0	0	161
18	Madison, Dak.....	State Normal School.....	1884	F. L. Cook.....	2	5	2	38	0	0	2	38	0	0	100
19	Spearsfish, Dak.....	Territorial Normal School.....	1884	Lacy E. Molen.....	2	5	4	36	0	0	4	36	0	0	100
20	Washington, D. C.....	Miner Normal School.....	1877	Lucy E. Molen.....	2	5	2	38	0	0	2	38	0	0	100
21	Washington, D. C.....	Washington Normal School*.....	1873	Emma S. Atkinson.....	(7)	1	32	26	0	0	32	26	32	26	53
22	De Funiak Springs, Fla.....	Florida State Normal College.....	1887	H. N. Felkel.....	2	1	32	26	0	0	32	26	32	26	53

a Will not open until September, 1889.

* Statistics of 1886-87.

TABLE 32.—Statistics of Public Normal School's for 1887-88.—PART I—Continued.

Post-Office Address.	Name.	Year of Opening.	Principal or President.		Instructors.		Pupils Enrolled.		Pupils below High-School Grade.		Pupils in Teachers' Training Course.				In Practice School.
											Male.	Female.	Male.	Female.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
23 Tallahassee, Fla.....	Florida State Normal School.....	1887	T. De S. Tucker.....	2	1	23	22	29	22	(a)	(a)			83	
24 Carbondale, Ill.....	Southern Illinois Normal University.....	1874	Robert Allen.....	9	6	300	304	118	109	117	110			289	
25 Englewood, Ill.....	Cook County Normal School.....	1863	Francis W. Parker.....	5	11	(619)	378	20	239	3	130			236	
26 Normal, Ill.....	Illinois State Normal University.....	1857	Edwin C. Hewitt.....	9	7	202	378	202	239	202	378	120	280		
27 Covington, Ind.....	Indiana Normal College.....	1886	J. V. Coombs.....	7	1	97	76			15	6				
28 Indianapolis, Ind.....	Indiana Normal School.....	1886	M. E. Nicholson.....	(3)											
29 Terre Haute, Ind.....	Indiana State Normal School.....	1870	William W. Parsons.....	14	9	375	414	82	102	375	414	80	175	184	
30 Cedar Falls, Iowa.....	Iowa State Normal School.....	1875	H. H. Seerley.....	4	7	122	310	0	0	122	310	0	6	150	
31 Des Moines, Iowa.....	West Des Moines Training School.....	1833	Elizabeth K. Mathews.....	1	1	0	6	0	0	0	0			206	
32 Emporia, Kans.....	Kansas State Normal School.....	1885	A. R. Taylor.....	7	6	246	423	39	0	0	39	0	38	200	
33 Louisville, Ky.....	Louisville Normal School.....	1871	Hiram Roberts.....	1	5	0	55	0	12	0	33	0	0	90	
34 Natchitoches, La.....	Louisiana State Normal School.....	1885	Thomas D. Boyd, A. M. b.....	3	3	11	110	0	0	3	28			25	
35 New Orleans, La.....	New Orleans Normal School.....	1885	Mary Staups.....	3	3	0	110	0	0	58	144			50	
36 Oakdale, Me.....	Eastern State Normal School.....	1867	George C. Furlington.....	2	6	45	185	3	37	45	185	15	71	73	
37 Farmington, Me.....	State Normal and Training School.....	1864	W. J. Corthell.....	2	5	21	97	0	0	0	0	0	0	214	
38 Gorham, Me.....	State Normal School.....	1879	Sarah M. Taylor.....	0	1	0	12	0	0	0	10				
39 Portland, Me.....	Practice School.....	1878	M. D. Barnes.....	2	2	90	76								
40 Springfield, Mo.....	Springfield Normal School.....	1886	M. A. Newell.....	0	1	32	273	0	0	3	78			1,000	
41 Baltimore, Md.....	Maryland State Normal School.....	1866	M. A. Newell.....	3	3	0	160	0	0	0	160				
42 Boston, Mass.....	Boston Normal School.....	1852	Larkin Duntun.....	5	6	37	150			5	25				
43 Bridgewater, Mass.....	Massachusetts Normal Art School.....	1870	George H. Bartlett.....	6	4	63	194	0	0	60	194	56	160	80	
44 Fall River, Mass.....	State Normal School.....	1840	A. G. Boyden.....	0	8	0	18	0	0	0	18	0	18	260	
45 Fall River, Mass.....	Fall River Training School.....	1881	Ellen H. Borden.....	2	13	0	240							85	
46 Framingham, Mass.....	State Normal School.....	1839	Ellen H. Borden.....	0	2	0	13	0	0	0	13	0	0	7	
47 Haverhill, Mass.....	Haverhill Training School.....	1881	Gora A. Newell.....	0	2	0	30	0	0	0	30	0	0	244	
48 Lawrence, Mass.....	Lawrence Training School.....	1880	Lilly F. Shepard.....	0	2	0	13	0	0	0	13	0	0	300	
49 Salem, Mass.....	State Normal School.....	1834	Daniel B. Hagar, Ph. D.....	2	11	0	274	0	274	0	274	0	225		
50 Westfield, Mass.....	State Normal School.....	1839	J. C. Greenough.....	4	4	6	146	0	0	6	146	6	115		

[illegible]

b Succeeding Dr. Edward E. Scheib.

a Normal work to begin October, 1899.

* Statistics of 1886-87.

TABLE 32.—Statistics of Public Normal Schools for 1887-88.—PART I—Continued.

Post-Office Address.	Name.	Year of Opening.	Principal or President.	Instructors.		Pupils Enrolled.		Pupils below High-School Grade.		Pupils in Teachers' Training Course.				In Practice School.
				Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Enrolled.	Average Attendance.		Male.	Female.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
94 Ashland, Oregon.....	Ashland State Normal School.....	1882	J. S. Sweet.....	2	4	47	60	20	24	2	1			44
95 Drain, Oregon.....	Drain Academy and State Normal School.....	1881	W. C. Hawley.....	1	3	(189)								
96 Monmouth, Oregon.....	State Normal School*.....	1882	D. T. Stanley, A. M.....	(8)	5	179	216	(74)		(178)				72
97 Bloomington, Pa.....	State Normal School.....	1889	D. J. Wallis, Jr.....	9	7	166	258			9	20			214
98 California, Pa.....	South-western State Normal School.....	1874	Theodore B. Noss.....	7	7	191	173			208	119	96	73	13
99 Clifton, Pa.....	State Normal School (thirteenth district).....	1887	A. J. Davis.....	8	5	191								
100 Edinborough, Pa.....	State Normal School.....	1861	J. A. Cooper.....	7	7	319	325	84	91	282	290	181	187	89
101 Erie, Pa.....	Teachers' Training Class.....	1883	H. S. Jones.....	4	2	1	25	0	0	1	25	1	24	0
102 Indiana, Pa.....	Indiana Normal School of Pennsylvania.....	1875	L. H. Durling.....	7	9	165	307			11	50			139
103 Kutztown, Pa.....	Keystone State Normal School.....	1866	Nathan C. Schaeffer.....	16	4	426	130							130
104 Lock Haven, Pa.....	Central State Normal School.....	1877	James Eldon.....	8	5	110	79			96	61			74
105 Mansfield, Pa.....	Pennsylvania State Normal School (fifth district)*.....	1862	D. C. Thomas.....	(16)		169	200			169	200			
106 Millersville, Pa.....	Pennsylvania State Normal School (second district).....	1859	E. O. Lyte.....	11	9	253	200							45
107 Philadelphia, Pa.....	Philadelphia Normal School for Girls.....	1848	George W. Fetter.....	2	37	0	1,973	0	0	0	228	0		575
108 Reading, Pa.....	Training School for Teachers.....	1887	Sarah M. Row.....	0	1	0	30				30			500
109 Shippensburg, Pa.....	Cumberland Valley State Normal School.....	1873	John F. McCreary.....	5	4	82	85	0	0	82	76	50	45	45
110 West Chester, Pa.....	State Normal School.....	1871	G. M. Phillips.....	11	12	228	278			125	225			20
111 Providence, R. I.....	Rhode Island State Normal School.....	1852	Thomas J. Morgan.....	3	4	8	151			0	0	0	0	0
112 Columbia, S. C.....	Winthrop Training School for Teachers.....	1886	D. B. Johnson.....	1	4	0	17	0	0	0	17			40
113 Knoxville, Tenn.....	Normal Department of Knoxville College.....	1875	J. S. McCulloch.....	3	9	105	112	23	21	9	7			143
114 Morristown, Tenn.....	Morristown Seminary and Normal Institute.....	1881	J. S. Hill.....	2	6	134	144	56	63	85	71	73	65	98

115	Nashville, Tenn.....	1875	Wm. H. Payne, LL. D.....	6	5	62	117	5	31	62	117	56	105	.....
116	Hempstead, Tex.....	1879	L. C. Anderson.....	5	3	100	40	16	10	100	40	95	35	114
117	Huntsville, Tex.....	1879	Joseph Baldwin.....	5	3	114	170	0	0	114	170	.....	.....	284
118	Castleton, Vt.....	1867	Abel E. Leavenworth.....	1	5	.....	(185)	0	0	.....	85	.....	.....	59
119	Johnson, Vt.....	1867	A. H. Campbell.....	2	6	26	85	0	0	26	85	.....	.....	59
120	Randolph, Vt.....	1867	Edward Conant.....	1	4	14	63	0	0	14	63	7	31	20
121	Farmville, Va.....	1884	John A. Cunningham.....	1	8	0	183	0	40	0	40	.....	.....	91
122	Hampton, Va.....	1868	S. C. Armstrong.....	2	36	370	235	.....	.....	.....	.....	.....	.....	.....
123	Petersburg, Va.....	1883	James Hugo Johnston ..	6	4	128	187	89	96	39	91	.....	.....	33
124	Fairmount, W. Va.....	1867	Conrad A. Sipe.....	4	2	162	106	107	86	133	63	.....	.....	8
125	Glenville, W. Va.....	1873	S. B. Brown.....	1	2	70	53	8	15	10	8	.....	.....	0
126	Harper's Ferry, W. Va.....	1867	N. C. Brackett.....	3	4	103	92	.....	.....	12	16	.....	.....	.....
127	Huntington, W. Va.....	1867	Thos. E. Hodges.....	1	3	64	98	.....	.....	.....	.....	.....	.....	.....
128	Shepherdstown, W. Va.....	1872	Asa B. Bush.....	2	2	35	29	0	0	35	29	.....	.....	.....
129	West Liberty, W. Va.....	1873	Robert A. Armstrong.....	1	2	52	50	20	20	25	25	.....	.....	.....
130	Milwaukee, Wis.....	1885	J. F. Maple.....	3	3	1	52	0	0	1	52	1	50	162
131	Onkosh, Wis.....	1871	George S. Albee.....	4	16	162	309	0	0	162	309	.....	.....	189
132	Platteville, Wis.....	1866	D. McGregor.....	6	8	163	277	51	86	112	191	.....	.....	.....
133	River Falls, Wis.....	1875	W. D. Parker.....	3	7	0	0	15	31	50	110	28	72	149
134	Whitewater, Wis.....	1868	Albert Salisbury.....	5	12	100	233	84	74	69	204	(173)	.....	111

* Statistics of 1886-87.

TABLE 32. — *Statistics of Public Normal Schools for 1887-88.* — PART II.

Name.	Graduates.			Volumes in Library.	Value of Prop-erty.		Productive Funds.		Tuition Fees (Year).			Average Cost of Board and Lodging (Year).	Income from—		
	Normal.	Since Open-Ing.	Other for 1887-88.		Scientific Apparatus.	Grounds and Build-ings.	Amount.	Interest.	Residents.	Non - Resi- dents.	Other Pupils.		Other Sources.	State, County, or Municipality.	Gifts and Be-quests.
2	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
ALABAMA.															
1 Training Class, Birmingham.....	4	4	0	1,500	.....	\$60,000	.....	.....	.....	.....	.....	\$100	\$7,500	\$1,050	0
2 State Normal School, Florence.....	29	119	0	1,000	\$1,500	20,000	0	0	\$6	\$6	\$24-30	63	4,000	1,000	0
3 State Normal and Industrial School.....	7	51	0	729	50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4 State Normal School, Jacksonville..	4	17	0	1,000	400	12,000	.....	.....	0	0	30	90	2,500	600	.....
5 Alabama Normal College for Girls..	10	32	6	600	500	10,000	.....	.....	.....	.....	18-45	150	12,500	400	.....
6 State Normal School, Troy.....	3	3	1	50	180	17,000	0	0	0	27	27	90	5,000	200	\$180
7 Tuskegee State Normal and In- dustrial School.	10	42	.....	3,783	130	70,000	.....	.....	0	0	0	50	3,000	.....	17,000
ARIZONA.															
8 The Territorial Normal School.....	3	8	0	.....	134	10,000	.....	.....	.....	.....	40	250	7,500	.....	.....
ARKANSAS.															
9 Southland College and Normal Institute.	0	20	0	300	150	33,000	\$32,000	\$1,600	11	11	11	78	420	325	400
10 Branch Normal College of Arkan- sas Industrial University.	6	21	0	2,000	500	50,000	.....	.....	.....	.....	10	80-100	8,000	.....	.....
CALIFORNIA.															
11 State Normal School, Chico.....	.....	.....	.....	.....	.....	80,000	.....	.....	.....	.....	.....	.....	.....	.....	.....
12 State Normal School, Los Angeles..	35	183	0	2,000	500	150,000	0	0	0	0	0	250	19,750	.....	0
13 Normal Department Girls' High School, San Francisco.	99	450	.....	.....	.....	.....	.....	.....	0	40	.....	.....	.....	.....	.....
14 State Normal School, San José.....	121	1,314	0	3,300	2,000	350,000	0	0	0	0	.....	180-200	33,000	.....	.....

		CONNECTICUT.														
		49	.....	4,000	.....	125,000	.....	.....	.....	0	.....	.....	.....	150	17,000	.....
15	Connecticut Normal and Training School.	19	.....	85	.....	7,000	.....	.....	.....	0	.....	.....	.....	.....	.....	.....
16	Cedar Street Training School.	33	121	0	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	.....
17	Welch Training School.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
DAKOTA.																
18	State Normal School	10	22	.....	.....	250	.....	.....	.....	.....	.....	.....	.....	125	17,000	.....
19	Territorial Normal School	10	10	0	.....	500	.....	.....	.....	0	.....	.....	.....	175	23,200	0
DISTRICT OF COLUMBIA.																
20	Minor Normal School.	38	175	0	75	.....	.....	.....	.....	0	0	0	0	0	.....	.....
21	Washington Normal School ^a	40	325	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
FLORIDA.																
22	Florida State Normal College.	0	0	53	480	300	.....	.....	.....	.....	.....	.....	.....	125	4,000	.....
23	Florida State Normal School	0	0	0	0	.....	.....	.....	.....	0	0	0	0	100	4,000	0
ILLINOIS.																
24	Southern Illinois Normal University.	13	144	0	7,500	162,250	0	0	21	21	.....	.....	.....	117	27,000	.....
25	Illinois State Normal University.	35	560	6	2,000	10,000	.....	.....	372	0	0	.....	.....	.....	27,494	0
26	Cook County Normal School.	63	853	.....	6,500	2,000	300,000	.....	.....	0	75	.....	.....	160	25,000	.....
INDIANA.																
27	Indiana Normal College.	15	.....	7	500	600	40,000	.....	.....	.....	40	.....	.....	40	1,300	.....
28	Indianapolis Normal School ^a	22	.....	0	200	.....	.....	.....	.....	.....	0	.....	.....	108	23,200	125
29	Indiana State Normal School.	43	358	0	1,400	550	235,700	0	0	0	.....	.....	.....	.....	.....	.....
IOWA.																
30	Iowa State Normal School.	31	167	0	.....	1,000	100,000	.....	.....	.....	.....	.....	.....	115	12,600	.....
31	West Des Moines Training School	6	36	0	.....	50	.....	.....	.....	0	0	.....	.....	200	1,000	.....
KANSAS.																
32	Kansas State Normal School.	40	330	1	5,000	4,500	100,000	282,000	19,500	10	10	.....	.....	120	129,850	0
KENTUCKY.																
33	Louisville Normal School.	36	413	.....	.....	300	20,000	.....	.....	.....	.....	.....	.....	.....	2,600	.....
LOUISIANA.																
34	Louisiana State Normal School.	12	25	0	2,000	.....	.....	.....	.....	0	0	.....	.....	100	13,000	2,000
35	New Orleans Normal School ^a	62	62	0	.....	0	.....	.....	.....	0	0	.....	.....	.....	600	0

^a Grounds only.
^d \$26,200 for building purposes.

^a Not available; twenty sections of land when Territory is admitted as a State.

^b Half sum appropriated for two years.

TABLE 32.—Statistics of Public Normal Schools for 1887-88.—PART II—Continued.

Name.	Graduates.			Volumes in Library.		Value of Prop-erty.		Productive Funds.		Tuition Fees (Year).				Average Cost of Board and Lodging (Year).	Income from—		
	Normal.		Normal Pu-pils.							Residents.	Non - Resi-dents.	Other Pupils.					
	In 1887-88.	Since Open-ing.		Other for 1887-88.	Scientific Apparatus.	Grounds and Build-ings.	Amount.	Interest.	24				25	26	27	28	29	30
2	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
MAINE.																	
36 Eastern State Normal School.....	30	454	0	675		\$25,000	0	0	\$4.50	0	\$20	\$100	\$6,333				
37 State Normal and Training School, Farmington.....	50	628	0	1,700	\$4,000	20,000						114	6,750				
38 State Normal School, Gorham.....	37	411	0	1,609	2,040	40,000	0	0	5	\$5	40	110	6,333	0	0		
39 Practice School, Portland.....	9	87	0	239					0	0	0						
40 Springfield Normal School.....	2	2	0		200	5,000			8	8	12	50	700				
MARYLAND.																	
41 Maryland State Normal School....	61	623	4	2,300	2,500	150,000	0	0	0		50	140	10,500	0	0		
MASSACHUSETTS.																	
42 Boston Normal School.....	84	974	0							90							
43 Massachusetts Normal Art School.....	90	90	16	300					10	100	100	155	15,000				
44 State Normal School, Bridgewater.....	69	2,055		4,050								0	800		\$261		
45 Fall River Training School.....	16	173	0		0	0	0	0	0	0	0	0	0	0	0		
46 State Normal School, Framingham.....	35	1,084	0	2,000	300	75,000	0	0	0	0	30	150	12,230	0	0		
47 Haverhill Training School.....	0	46	0		0				0	0	0	0	0	0	0		
48 Lawrence Training School.....	20			150		17,890	0	0	0	0	230	150	15,000	0	0		
49 State Normal School, Salem.....	61	1,639		8,000	1,000	50,000			0	0			12,250				
50 State Normal School, Westfield.....	26	1,175	0	2,000	0	150,000									0		
51 State Normal School, Worcester....	30	360	0	6,834	1,600	100,000			0	0	30	154					
MICHIGAN.																	
52 State Normal School.....	117	1,547	0	9,353	5,765	175,000	\$60,563	\$4,239	10	10	10	100	38,178		\$302		

MINNESOTA.																
53	State Normal School, Mankato.....	39	356	0	4,892	1,200	50,000	0	0	0	0	0	18	108	16,000	.....
54	Teachers' Training Class, Minneapolis.....	25	25	0	.....	.....	.....	.....	0	0	0	0	.....	.....	.....	.....
55	State Normal School, St. Cloud.....	26	361	.....	.....	5,000	150,000	0	0	0	30	12	120	120	16,000	.....
56	St. Paul Teachers' Training School.....	22	.....	0	1,033	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
57	State Normal School, Winona.....	55	738	0	2,000	1,000	175,000	.....	.....	.....	.....	24	150	18,000	.....	.....
MISSISSIPPI.																
58	State Normal School.....	6	31	0	3,000	1,000	10,000	.....	.....	0	0	0	65	65	2,500	.....
59	Tougaloo University, Normal Department.....	0	39	0	500	300	60,000	.....	8	8	8	8	72	72	1,500	9,000
MISSOURI.																
60	Missouri State Normal School (3d dist.).....	21	76	0	1,800	1,500	65,000	.....	.....	0	0	.....	110	110	10,000	1,935
61	Lincoln Institute.....	5	52	0	900	1,000	65,000	.....	.....	0	0	0	70	70	9,000	0
62	Missouri State Normal School (1st dist.).....	76	958	.....	1,100	450	150,000	.....	20	20	20	.....	200	200	12,500	.....
63	St. Louis Normal School.....	83	1,400	.....	500	2,000	25,000	.....	.....	.....	.....	.....	.....	.....	11,893	0
64	Missouri State Normal School (2d dist.).....	72	727	0	1,000	200	200,000	0	0	0	20	20	120	120	12,500	0
NEBRASKA.																
65	Bloomington Normal School.....	2	2	0	200	75	6,000	0	0	0	5	3	100	100	.....	.....
66	State Normal School.....	55	782	0	5,000	2,000	110,000	(c)	6,000	0	0	0	120	120	44,000	0
NEW HAMPSHIRE.																
67	City Training School, Manchester*.....	61	488	.....	3,250	.....	12,500	.....	.....	0	0	0	.....	.....	9,000	0
68	New Hampshire State Normal School.....	13	335	.....	450	.....	40,000	0	0	0	0	20	140	140	9,000	0
NEW JERSEY.																
69	Newark Public Normal School.....	33	.....	.....	140	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
70	Normal Training Class, Paterson.....	25	.....	.....	1,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
71	New Jersey State Normal School.....	35	1,103	0	2,000	5,000	500,000	0	0	0	0	50	140	140	20,000	0
NEW YORK.																
72	State Normal School, Albany.....	134	3,115	18	.....	.....	.....	.....	.....	.....	.....	.....	160	160	.....	1,000
73	Teachers' Training Class, Albany.....	24	189	.....	.....	.....	75,000	0	0	0	75	0	.....	.....	500	0
74	Training School, Brooklyn.....	71	145	0	789	657	.....	0	0	0	0	40	140	140	48,781	0
75	State Normal School, Buffalo.....	32	375	5	10,709	220,000	.....	0	0	0	0	.....	.....	.....	.....	0

* Statistics of 1886-87.
 a One hundred pay scholars may be received at \$50 a year in addition to the 200 State scholarships.
 b The fee charged those who do not intend to teach in the State.
 c Twenty sections of land.

TABLE 32.—Statistics of Public Normal Schools for 1887-88.—PART II—Continued.

Name.	Graduates.			Volumes in Library.			Value of Property.		Productive Funds.		Tuition Fees (Year).				Average Cost of Board and Lodging (Year).	Income from—				
	Normal.		Other for 1887-88.	16	17	18	19	20	21	22	23	24	25	26		27	28	29	30	
	In 1887-88.	Since Opening.																		
NEW YORK—continued.																				
76	State Normal and Training School, Cortland.			39	648	1	2,232	\$6,000	\$93,750							\$140	\$18,069			
77	State Normal and Training School, Fredonia.			25	435	3	2,200	7,000	126,000	0	0	0	0	0	\$12-24	99	22,359			
78	State Normal and Training School, Genesee.			43	459	4	11,000	5,000	134,000	0	0	0	0	0	24-32	120	19,602			
79	State Normal and Training School, New Paltz.			18	23	5	3,000	1,500	45,000						24	150	18,000			
80	Normal College, New York.....			291	4,057	0	3,000	10,000	750,000	0	0	0	0	0	0	0	0	105,317		
81	State Normal and Training School, Oswego.			79	1,395	0	1,800	5,000	95,000			α 0	0	0	0	120	22,323	0	0	
82	State Normal and Training School, Potsdam.			39	426				135,000						28	150	25,900	\$305	0	
83	Teachers' Training Class, Rochester			52	300											250-300	618			
84	Syracuse Training School.....				142	26														
NORTH CAROLINA.																				
85	Fayetteville State Colored Normal School.			4	83	0	1,000	100	2,600							54-72	2,000			
86	Goldsborough State Normal School.			0	0	0	115	0	1,500	0	0	0	0	0	0		1,500			
87	Plymouth State Colored Normal School.			2	2	2	125		800								1,500		\$100	
88	Salisbury State Colored Normal School.			0	6	0	150		1,500	0	0	0	0	0	0		1,500			
OHIO.																				
89	Normal Department of the Ohio University.			15		11	7,000					\$25	\$125	30	100	2,000				

[illegible]

a For kindergarten training, \$500.

* Statistics of 1886-87.

TABLE 32.—Statistics of Public Normal Schools for 1887-88.—PART II—Continued.

Name.	Graduates.			Volumes in Library.	Value of Property.		Productive Funds.		Tuition Fees (Year).			Average Cost of Board and Lodging (Year).	Income from—		
	Normal.		Other for 1887-88.		Scientific Apparatus.	Grounds and Buildings.	Amount.	Interest.	Residents.	Non-Residents.	Other Pupils.		State, County, or Municipality.	Other Sources.	Gifts and Bequests.
	In 1887-88.	Since Opening.													
2.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
TEXAS.															
116	22	64	0	375	\$250	\$30,000			\$5	\$5	\$5	\$97	\$15,500		0
117	147	882	0	6,500	3,000	20,000			0	0	0	135	30,000	\$2,000	0
VERMONT.															
118	19	764	0		2,000	23,000	0	0	0	0	0		2,940	500	0
119	30	436	0	1,500	150	5,000			24	24	8	150	1,928	650	\$350
120	23	770	0	1,300	500	8,330	\$10,000	\$300	24	24		100	2,612	500	0
VIRGINIA.															
121	23	48	0	500	600	30,000	0	0	30	30	25	108	10,000	2,000	0
122	41	700	0	5,500	0	450,000	157,911	6,613	0	0	0	98	10,329		
123	1	31	0	350		150,000			60		60	50	20,000		
WEST VIRGINIA.															
124	14	256		1,000	600	20,000				20-30	20-30	110	2,200	950	
125	4	62	0	950	100	8,000	0	0	3	3	32	110	4,200		
126	8	161	0	3,550		60,000	15,000	600	6	10	10	10	620	1,950	
127	13		0	350	750	60,000	0	0	0	20-21	20-24	115	2,200		
128	3	175	0	900	200	10,000			3	3	24	108	2,500	0	0
129	5	134	0	300	175	10,000			0	24	24	130	2,050		

TABLE 33.—Statistics of Private Normal

	Post-Office Address.	Name.	Year of Opening.	President or Principal.	Instruct-ors.		Pupils En-rolled.	
					Male.	Female.	Male.	Female.
1	2	3	4	5	6	7	8	
1	Huntsville, Ala....	Central Alabama Normal Institute.	1872	A. W. McKinney.....	1	2	78	78
2	Mobile, Ala.....	Emerson Institute.....	1865	Charles M. Stevens..	1	8	78	169
3	Stockton, Cal.	Stockton Business College and Normal Institute.	1875	Trask and Ramsey..	11	4	150	100
4	Augusta, Ga.....	The Paine Institute.....	1884	Geo. Wms. Walker..	3	3	49	62
5	Cuthbert, Ga.....	Howard Normal School....	1870	F. H. Henderson.....	1	1	62	62
6	Dixon, Ill.....	Northern Illinois Normal School.	1881	J. B. Dille.....	14	7	785	487
7	Geneseo, Ill.....	Northwestern Normal.....	1884	W. J. Stevens.....	7	3	(335)	
8	Macomb, Ill.....	Macomb Normal and Commercial College.	1833	John L. Whitty.....	4	2	57	84
9	Oregon, Ill.....	Wells' School for Teachers and School of Individual Instruction.	1879	E. L. Wells.....	2	0	48	89
10	Angola, Ind.....	Tri-State Normal College...	1885	L. M. Sniff.....	7	6	280	225
11	Mitchell, Ind.....	Southern Indiana Normal College.	1880	E. F. Sutherland	6	3	400	400
12	Valparaiso, Ind...	Northern Indiana Normal School.*	1873	H. B. Brown and O. P. Kinsey.	(28)		1,875	1,228
13	Algona, Iowa	Northern Iowa Normal School.	1888	J. C. Gilchrist.....	3	4	24	118
14	Bloomfield, Iowa.	Normal and Scientific Institute.	1874	R. S. Galer.....	3	3	69	92
15	Columbus Junction, Iowa.	Eastern Iowa Normal School.*	1874	E. R. Eldridge	(9)		112	104
16	Dexter, Iowa.....	Dexter Normal College.....	1880	Wm. H. Monroe.....	7	4	(400)	
17	Ottumwa, Iowa...	Ottumwa Normal School ...	1872	Mrs. Martha A. Peck	0	1	12	30
18*	Shenandoah, Iowa	Western Normal College...	1881	Wm. M. Croan	22	6	1,240	670
19	Storm Lake, Iowa	Storm Lake Normal and Business School.	1887	L. Greenwood and C. A. Whiting.....	2	3	60	80
20	Woodbine, Iowa...	Woodbine Normal School and Academy.*	1887	H. A. Kinney.....	(4)		.....	.....
21	Fort Scott, Kans.	Kansas Normal College....	1878	D. E. Sanders.....	10	3	(650)	
22	Bowling Green, Ky.	Southern Normal School and Business College.	1875	Mell and Williams..	10	3	(800)	
23	Madisonville, Ky	National Institute.....	1877	E. McCulley.....	4	2	113	58
24	Sherwood, Mich.	Sherwood Normal School..	1886	F. L. Kern.....	3	0	30	20
25	Jackson, Miss.....	Jackson College.....	1886	C. Ayer.....	4	4	129	127
26	Pleasant Hope, Mo.	Pleasant Hope Normal Academy.	1880	J. C. Ryan.....	3	3	70	60
27	Republican City, Nebr.	McPherson Normal College.	1884	W. N. Doyle.....	3	8	47	55
28	New York, N. Y...	College for the Training of Teachers.	1887	Nicholas Murray Butler, PH. D.	31	11	10	93
29	Raleigh, N. C.....	St. Augustine Normal School and Collegiate Institute.	1868	Robt. B. Sutton.....	6	3	72	83
30	Defiance, Ohio.....	Defiance College.....	1886	Frank W. Knapp....	3	4	40	45
31	Tremont City, Ohio.	Western Normal University.	1886	B. L. Barr.....	3	1	50	6
32	Wadsworth, Ohio	Western Reserve Normal College.	1865	J. B. Eberly, A. M.	5	2	118	91
33	Wauseon, Ohio.....	Northwestern Normal and Collegiate Institute.*	1881	Solomon Metzler, A. M.	(12)		283	201
34	Woodville, Ohio..	Teachers' Seminary.....	1882	Rev. W. Steinmann, PH. D.	4	0	28	0
35	Muncy, Pa.....	Lycoming County Normal School.	1870	Wm. R. Peoples.....	6	0	102	99
36	Aiken, S. C.....	The Schofield Normal and Industrial School.	1868	Martha Schofield...	2	5	165	182
37	Charleston, S. C...	Avery Normal Institute....	1865	Morrison A. Holmes.	2	6	110	197
38	Greenwood, S. C...	The Brewer Normal School.	1871	J. E. B. Jewett.....	1	2	108	78
39	Memphis, Tenn...	Le Moyne Normal Institute.	1871	Andrew J. Steele....	2	10	176	148

* Statistics of 1886-87.

Schools for 1887-88.—PART I.

Pupils in Teachers' Training Course.					Pupils.							
Enrolled.		Average Attendance.		Children in Practice School.	Below High School Grade.		In Commercial Course.		Preparing for Classical Course.		Preparing for Scientific Course.	
Male.	Female.	Male.	Female.		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
9	10	11	12	13	14	15	16	17	18	19	20	21
10	12				15	30						39
0	5				72	142						2
20	70						75	25				3
18	30				(37)				4	0	0	4
15	27				47	35			3	6		5
85	90						300	75				6
					(230)		(29)		2	1		7
(a)	(a)											8
40	81				0	0	0	0	0	0	0	9
100	80						30	20				10
28	25						20	1				11
1,875	1,228											12
18	106			132	0	0	20	22	0	0	0	13
35	49			0	54	84	8	5				14
53	47											15
(300)							(45)					16
4	20				8	14	0	0	0	0	1	17
(500)							347	12				18
				0	18	25	15	5	2	1	0	19
												20
				100			(150)					21
							25	150				22
26	29						29	7				23
11	10						3	2				24
(131)												25
25	20				15	16	8	0	25	20	6	26
15	10	12	8		(77)		12	5				27
10	93	9	88	572	0	0	0	0	0	0	0	28
25	30	23	25	0	25	44	0	0	12	10	0	29
5	6				15	15			(b)	(b)		30
					43	1	4	2	5	1	2	31
50	40				0	0	20	0	10	2	75	32
233	201											33
28	0	23	0		0	0	0	0	1	0	1	34
98	97	97	96		0	0	6	7	3	1	2	35
6	9				159	173						36
4	7				70	103	0	0	2	4		37
17	10				90	66	0	0	0	0	0	38
106	131	(189)		144								39

a The majority of the students take the teachers' course.

b Fifty-five in academic course.

TABLE 33.—*Statistics of Private Normal*

	Post-Office Address.	Name.	Year of Opening.	President or Principal.	Instructors.		Pupils Enrolled.	
					Male.	Female.	Male.	Female.
	1	2	3	4	5	6	7	8
40	Austin, Tex.....	Tillotson Collegiate and Normal Institute.*	1881	Rev. John Ker-shaw, president.	(11)		(113)	
41	Buckhannon, W.Va.	West Virginia Normal and Classical Academy.	1882	W. O. Fries, A. M.....	3	5	74	53
42	Milwaukee, Wis..	National German-American Teachers' Seminary..	1878	Emil Dapprich.....	4	2	11	14
43	St. Francis, Wis...	Catholic Normal School of the Holy Family.	1871	Charles Fessler.....	6	.....	89	.....

* Statistics of 1886-87.

Schools for 1887-88.—PART I—Continued.

Pupils in Teachers' Training Course.					Pupils.								
Enrolled.		Average Attendance.		Children in Practice School.	Below High School Grade.		In Commercial Course.		Preparing for Classical Course.		Preparing for Scientific Course.		
Male.	Female.	Male.	Female.		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
9	10	11	12	13	14	15	16	17	18	19	20	21	
(13)												40	
30	20						40	23	15	10	20	13	41
11	14			102	0	0	0	0	0	0	0	0	42
45	0				44	0	36	0					43

TABLE 33.—Statistics of Private Normal Schools for 1887-88.—PART II.

Name.	Graduates.				Volumes in Library.	Value of Property.		Productive Funds.		Annual Charge for Tuition.				Average Cost of Board and Lodging (Year).	Income from—											
	Normal.		In 1887-88.	Since Open- ing.		Other for 1887-88.	Scientific Apparatus.	Grounds and Build- ings.	Amount.	Interest.	Normal Pupils.				Other Pupils.	Sources other than Tuition Fees.	Gifts and Bequests.									
	22	23									24	25	26					27	28	29	30	31	32	33	34	35
ALABAMA.																										
1 Central Alabama Normal Institute.....					400		\$12,000				\$2	\$2	\$2		\$72											
2 Emerson Institute.....	0	17	0	100	\$4,350	10,000					10	10	6-10													
CALIFORNIA.																										
3 Stockton Business College and Normal Institute...				100	500	40,000	0	0	50-75						156											
GEORGIA.																										
4 The Paine Institute.....	5	15	0	398		15,000	\$25,000	\$1,500	9	9	9	9	9	9	72	\$2,732	0									
5 Howard Normal School.....						800			9	9	9	9	9	9	63	120										
ILLINOIS.																										
6 Northern Illinois Normal School.....				2,500	5,000	200,000	0	0	40	40	40	40	40	105	0	0	0									
7 North-western Normal.....			30	1,080	500	30,000			30	30	30	36	90													
8 Macomb Normal and Commercial College.....		28		100	0	4,000	0	0	30	30	30	30	90-120	0	0	0	0									
9 Wells School for Teachers and School of Indi- vidual Instruction.....				100	100	5,000	0	0	52	52	52	52														
INDIANA.																										
10 Tri-State Normal College.....				1,000	1,000	30,000	0	0	38	38	38	38	96	0	0	0	0									
11 Southern Indiana Normal College.....				1,500	400	18,000			38	38	38	38	110	300	\$360											
12 Northern Indiana Normal School.....	192	4,166	321	8,000		300,000			40	40	40	40														
IOWA.																										
13 Northern Iowa Normal School.....	9	11	0	400	300	10,000			28	28	28	28	100	1,500												

14	Normal and Scientific Institute.....	8	.....	5	1,200	250	5,000	0	0	32	32	44	80	0	0
15	Eastern Iowa Normal School.....	8	84	2	500	.....	30,000	.....	.....	32	82	32	.....	.....	.....
16	Dexter Normal School.....	22	14	640	500	.....	2,000	.....	.....	40	40	40	103-140	.....	.....
17	Ottumwa Normal School.....	.....	.....	0	.....	.....	.....	0	0	27	27	27	.....	.....	.....
18	Western Normal College.....	42	108	750	.....	750	60,000	.....	.....	40	40	40	154	.....	.....
19	Storn Lake Normal and Business School.....	0	0	800	.....	800	.....	.....	.....	30	30	67	80	1,500	1,200
20	Woodbine Normal School and Academy.....	.....	.....	.....	.....	.....	8,000	.....	.....	23	23	23	.....	.....	.....
KANSAS.															
21	Kansas Normal College and Business Institute.....	35	.....	38	1,200	500	40,000	.....	.....	40	40	40	140	0	0
KENTUCKY.															
22	Southern Normal School and Business College.....	13	180	.....	1,000	500	40,000	0	0	40	40	40	76	.....	.....
23	National Institute.....	.....	.....	.....	800	30	6,000	.....	.....	39	39	39	130	.....	50
MICHIGAN.															
24	Sherwood Normal School.....	0	0	0	180	35	8,000	.....	.....	30	30	30	90	0	0
MISSISSIPPI.															
25	Jackson College.....	.....	.....	.....	.....	.....	35,000	.....	.....	8	8	8	64	.....	.....
MISSOURI.															
26	Pleasant Hope Normal Academy.....	.....	.....	.....	200	18	3,000	0	0	27	27	27	100	0	0
NEBRASKA.															
27	McPherson Normal College.....	.....	.....	.....	1,000	500	10,000	.....	.....	25	25	30	80	.....	.....
NEW YORK.															
28	College for the Training of Teachers.....	47	47	0	1,200	600	.....	.....	.....	60	60	.....	350	0	0
NORTH CAROLINA.															
29	St. Augustine Normal School and Collegiate Institute.....	0	.....	.....	1,500	100	25,500	33,000	2,640	.....	9	9	87	1,920	.....
OHIO.															
30	Defiance College.....	.....	.....	.....	50	50	25,000	0	0	20-40	20-40	20-40	120	.....	.....
31	Western Normal University.....	0	0	125	0	0	8,500	0	0	40	40	40	105	500	.....
32	Western Reserve Normal College.....	5	5	2	1,000	100	30,000	0	0	21	24	20	114	0	.....
33	Northwestern Normal and Collegiate Institute.....	.....	.....	.....	1,000	.....	25,000	.....	.....	0	0	.....	.....	.....	.....
34	Teachers Seminary, Woodville.....	2	30	2	500	.....	15,000	.....	.....	0	0	25	100	3,000	.....
PENNSYLVANIA.															
35	Lycoming County Normal School.....	23	63	0	500	100	30,000	.....	1,600	8	8	8	75	.....	.....

* Statistics of 1886-87.

TABLE 33.—Statistics of Private Normal Schools for 1887-88.—PART II—Continued.

Name.	Graduates.			Volumes in Library.		Value of Property.		Productive Funds.		Annual Charge for Tuition.			Average Cost of Board and Lodging (Year).		Income from—	
	Normal.															
	In 1887-88.	Since Open- ing.	Other for 1887-88.			Scientific Apparatus.	Grounds and Build- ings.	Amount.	Interest.	Resident.	Non-Res- ident.	Other Pupils.			Sources Tuition Fees.	Gifts and Bequests.
2	22	23	24	25	26	27	28	29	30	31	32	33	34	35		
SOUTH CAROLINA.																
36 The Schofield Normal and Industrial School.....	11	10		800		\$25,000	\$7,500						\$4,929	\$12,279		
37 Avery Normal Institute.....				600		\$25,000								40		
38 The Brewer Normal School						5,000	0	0								35
TENNESSEE.																
39 Le Moyne Normal Institute.....	10	64		2,000	1,200	30,000	10,000	\$60		14	14	10	80	6,150		
TEXAS.																
40 Tillotson Collegiate and Normal Institute *																
WEST VIRGINIA.																
41 West Virginia Normal and Classical Academy.....		3	10	450	400	15,000	0	0		27	27	27	125		3,000	
WISCONSIN.																
42 National German-American Teachers' Seminary...	7	79	0	500	600	30,000	70,000	5,000		40	40		200	3,506		3,506
43 Catholic Normal School of the Holy Family.....	7	0	1			41,000	0	0				40	140			

* Statistics of 1886-87.

TABLE 34.—Schools and Classes for Training Kindergarten Teachers for 1887-88.

Location.	School.	Principal.	Instructors.	Students.	Length of Course in Months.	Annual Charge for Tuition.
1	2	3	4	5	6	7
1 San Francisco, Cal.....	California Kindergarten Training School*	Mrs. Kate D. Wiggin.....	2	31	10	a \$100
2 San Francisco, Cal.....	Pacific Kindergarten.....	Mrs. M. E. Arnold.....	2	15	10	50
3 New Britain, Conn.....	Kindergarten Department of Connecticut Normal and Training School.....	Gurn W. Mungin.....	4	12	12	100
4 Washington, D. C. (127 13th Street).....	Froebel Normal Institute.....	Miss Susie P. Pollock.....	3	10	8	100
5 Washington, D. C. (923 19th Street).....	Garfield Kindergarten Training School*.....	Miss Emily Beaver.....	2	4	8	100
6 Washington, D. C. (1017 10th Street).....	Washington Kindergarten Normal Institute.....	Mrs. Louise Pollock.....	2	10	8	100
7 Chicago, Ill. (2535 Prairie Avenue).....	Chicago Training School for Kindergartners*.....	Mrs. Elizabeth Harrison.....	2	18	7	50
8 Chicago, Ill. (175 2d Street).....	Normal Class, Chicago Free Kindergarten Association.....	Miss Eva B. Whitmore.....	4	68	15	0
9 Chicago, Ill. (17 E. Van Buren Street).....	Training Class, Chicago Froebel Kindergarten Association.....	Mrs. Alice H. Putnam.....	2	27	10	50
10 Galesburg, Ill. (25 W. Tompkins St.).....	Kindergarten Normal Class.....	Miss M. Evelyn Strong.....	1	7	12	100
11 Indianapolis, Ind. (24 and Meridian Streets).....	Indiana Kindergarten and Primary Normal School.....	Mrs. Eliza A. Blaker.....	2	43	10	640
12 La Porte, Ind.....	La Porte Kindergarten Training School.....	Mrs. Eudora L. Hallmann.....	2	14	10	100
13 West Des Moines, Iowa.....	Public Kindergarten Training Class.....	Miss Rose Morrison.....	1	8	12	0
14 Emporia, Kans.....	Kindergarten Department of State Normal School.....	Familie Kuhlmann.....	1	10	10	5
15 New Orleans, La.....	Training Class of Southern Academic and Kindergarten Institute.....	Mrs. J. E. Seaman.....	2	8	9	100
16 Baltimore, Md.....	Kindergarten Training Class.....	Mrs. Agnes Ross Parkhurst.....	2	13	7	100
17 Boston, Mass.....	Chauncy Hall Training Class.....	Lucy Wheelock.....	1	4	10	100
18 Boston, Mass.....	Cushman School Kindergarten Training Class*.....	Miss Annie L. Page.....	1	5	8	150
19 Boston, Mass.....	Hotel Cluny Kindergarten Normal Class.....	Mrs. Annie K. Brown.....	1	1	7	125
20 Boston, Mass. (62 Chestnut Street).....	Kindergarten Normal Class.....	Miss Mary J. Garland.....	1	.....	8	150
21 Boston, Mass. (20 Hanson Street).....	Kindergarten Training Class*.....	Miss L. H. Synmonds.....	1	20	12	120
22 Boston, Mass. (Cambridgeport).....	Boardman Street Kindergarten Training Class*.....	Mrs. Caroline C. Voorhies.....	1	2	8	150
23 Muskegon, Mich.....	Public Kindergarten Normal Class*.....	Sarah E. Grigg.....	1	4	12	0
24 Minneapolis, Minn. (9th Street and 4th Avenue).....	Gelissemane Kindergarten Training Class.....	Florence S. Finch.....	1	7	12	75
25 St. Cloud, Minn.....	Kindergarten Training Class, State Normal School*.....	Mrs. A. B. Ogden.....	1	4	8	.....
26 Winona, Minn.....	Kindergarten Training Class, State Normal School.....	Mrs. Harriet R. Donovan.....	1	2	12	50
27 St. Louis, Mo.....	Public Kindergarten Normal Class.....	Miss Mary C. McCulloch.....	3	23	24	0
28 Albany, N. Y.....	Kindergarten Department of the State Normal School.....	Ida Isdel.....	2	50	14	0
29 New York, N. Y. (109 W. 54th Street).....	Free Kindergarten Training Class of W. Yorkington's School.....	Caroline T. Havett.....	1	.....	10	0
30 New York, N. Y. (70 Avenue D).....	Kindergarten Normal Class of Children's Charitable Union.....	Miss Grace A. Cohen.....	1	6	10	0

a Free and half scholarships to all assistants in free kindergartens.

* Statistics of 1886-87.

b Eighteen free scholarships granted each term.

TABLE 34.—*Schools and Classes for Training Kindergarten Teachers, for 1887-88—Continued.*

	Location.	School.	Principal.	Instructors.	Students.	Length of Course in Months.	Annual Course for Tuition.
	1	2	3	4	5	6	7
31	New York, N. Y. (18 E. 130th Street).....	Kindergarten Training Class*	Misses Ellis and Greene	2	5	8	100
32	New York, N. Y. (1509 Broadway)	Kindergarten Training Class Douai Institute	Miss E. Von Briesen	1	5	9	100
33	New York, N. Y.	Kindergarten Department Training College for Teachers	Miss Angelina Brooks	2	15	12	60
34	New York, N. Y. (275 5th Avenue).....	Seminary for the Training of Kindergarten*	Prof. John Kraus and Maria Kraus-Boelte	2	.....	.....	.....
35	New York, N. Y. (139 W. 45th Street).....	Training School for Kindergartners	Mary L. Van Wagenen	1	27	10	100
36	Oswego, N. Y.	Oswego Normal Kindergarten	Mrs. C. R. Burr	1	15	12	100
37	Rochester, N. Y.	Normal Training Class	Miss Mary E. Tooke	1	13	12	0
38	Rochester, N. Y. (124 Lake Avenue)	Lake Avenue Training School for Kindergartners	Margaretha Othen	1	3	10	100
39	Rome, N. Y. (112 Huntington Street).....	Rome Froebel Kindergarten	Amelia A. Smith	1	2	6-12	60
40	Syracuse, N. Y. (74 James Street)	Training School for Kindergartners*	Mrs. M. C. Sitt	3	3	12	50
41	Cincinnati, Ohio	Training Class of Free Kindergarten Association	Mrs. Edna D. Worden	1	28	10	0
42	Cleveland, Ohio (Olivet Chapel)	Free Normal Kindergarten Class*	Miss Lillian G. Platt	1	4	12	0
43	Portland, Oregon (246 Washington Street).....	Oregon Kindergarten Training School	Mrs. Caroline Dunlap	3	7	12	100
44	Lancaster, Pa. (117 N. Duke Street).....	Training Class for Kindergarten Teachers	Miss Anna M. Pennock	1	2	6	75
45	Philadelphia, Pa. (Sansom Street above 21st).....	Froebel Training School for Kindergartners	Miss M. L. Morrison .....	.....	.....	.....	100
46	Philadelphia, Pa. (1335 Spring Garden Street).....	Normal Kindergarten Training School	Miss Sarah A. Stewart	1	225	10	0
47	Philadelphia, Pa. (121 N. 11th Street).....	Normal Training School	Mrs. Guion Gourlay	3	12	7	100
48	Philadelphia, Pa. (1333 Pine Street).....	Philadelphia Training School for Kindergartners	Mrs. M. L. Van Kirk	5	85	10	100
49	Providence, R. I. (44 Angell Street)	Rhode Island Normal Training School for Kindergartners	Mrs. Carolyn M. N. Alden	3	12	12	100
50	Nashville, Tenn. (3 Broad Street)	Kindergarten Training School	Miss Lulu Trousdale	5	9	5	50
51	Salt Lake City, Utah (125 W. 3rd Street).....	Kindergarten Training School*	Mrs. Marcus Jones	1	30	12	32
52	Janesville, Wis.	Kindergarten Training Class	Miss Sue Harlow	1	2	12	.....
53	Milwaukee, Wis. (209 Broadway)	Free Normal Class, Mission Kindergarten Association*	Mrs. M. I. Carpenter	1	13	10	0
54	Milwaukee, Wis. (643 Broadway)	Training Class for Kindergartners	Emil Dapprich	6	20	30	0
55	Milwaukee, Wis. (693 Island Avenue).....	Northwest Side Training Class	Anna Grellke	2	1	6	.....

* Statistics of 1886-87.

CHAPTER X.

SECONDARY INSTRUCTION.

EFFORTS AND PURPOSES OF THE OFFICE WITH RESPECT TO SECONDARY SCHOOLS.

Since 1872 the Office has made great efforts to secure reliable statistics of the secondary school work of the country. Two purposes have animated these efforts; the first was to make the statistical record complete as regards the educational provision of the country, and the number of youth yearly instructed; the second was to collect a body of information relative to secondary instruction, which might lead to a clear understanding of the conditions under which this important part of educational work is maintained, and promote measures for its improvement.

In order to arrive at the desired information, an inquiry as to the number of pupils in private schools has been embodied in the forms issued in successive years for the reports of State systems and city systems. On the other hand, the forms prepared for secondary schools, individually considered, have been sent to public as well as to private schools.

Each year has witnessed an increased fullness in respect to the report of private school enrolment on the first two classes of forms specified, while at the same time the number of individual schools, both public and private, reporting under the head of secondary, has also increased.

It appears that the first purpose of the inquiries, namely, the securing complete statistics of school attendance, is likely to be as fully accomplished as is possible by continuing the inquiries specified on State and city forms.

For the accomplishment of the second purpose, viz, the exhibit of scholastic conditions and tendencies, it is desirable to limit the inquiries to schools which present in their organization and conduct, the recognized characteristics of the secondary grade of educational work. For obvious reasons, discrimination in this respect is extremely difficult. Some progress toward the end desired has been accomplished by the classification of the schools according to the sex of students. The division of the schools into secondary and preparatory, formerly employed in the Reports of this Office, had very little application outside of New England, and even there was the occasion of more or less confusion and complaint. Classification on the basis of sex, which is a basis universally employed, suits the characteristics which are at present stamped upon the private schools of the country in general.

The end under consideration, namely, the exhibit of scholastic conditions, is further served by removing the statistics of public high schools from those of academies, seminaries, etc. The former are regulated by law, and are or should be in great measure adapted to the practical requirements of their respective localities. The latter must, necessarily, owe their distinction, if they possess any, to their power of maintaining the highest order of scholastic ideals. The more clearly and distinctly the work of both classes of secondary schools (*i. e.*, public and private) is displayed, and the more thoroughly it is comprehended, the more certain it is that funds will be forthcoming for its free and full development.

As the high schools of the country are for the most part located in cities, repetition is avoided by including their tabulation in the city systems (Table 24).

The form prepared for private seminaries, endowed academies, etc., contained an inquiry as to the number of pupils below the secondary grade. Schools which reported their entire attendance in elementary grade have not been tabulated. The elimination of these is also, it will be seen, in the line of specialization mentioned previously.

The inquiry as to the number of pupils below academic grade was answered by 54 per cent. of the private schools for both sexes; 44 per cent. of the schools for girls and 42 per cent. of the private schools for boys. The difference between this number and the total enrolment has been entered in the detailed Table 42. The totals have not been included in the summarized view, as they represent less than half the whole number of schools reporting.

SCHOLASTIC WORK OF SECONDARY SCHOOLS.

The important part which private schools perform in the preparation of students for colleges is indicated by the analysis of statistics relating to that work recently collected by this Office.

Massachusetts led all the States in the number of schools answering the inquiry upon that point, and as all classes of secondary schools are well represented in that State, and all well organized, the information supplied therefrom is particularly significant.

The schools of Massachusetts answering this special inquiry were classified as follows: High schools, 71; private schools for girls, 17; private schools for boys, 17; private schools for both sexes, 31.

The proportion of students reported as preparing for college or for scientific schools in the several classes of schools were as follows: High schools, 15 per cent.; private schools for girls, 10 per cent.; private schools for boys, 63 per cent.; private schools for both sexes, 10 per cent.

Of the seventeen private schools for boys included in the report from Massachusetts six are endowed academies, and four others possess property ranging in value from fifty to two hundred and fifty thousand dollars. Twelve of the seventeen schools reported each more than 50 per cent. of their pupils preparing for colleges or for superior schools of science.

For the other classes of schools the proportions were much lower. Three private schools for girls reported from 40 to 80 per cent. of their pupils in preparatory course, while in the remaining fourteen which made any report under this head the highest ratio was 11 per cent. Of the mixed schools two reported above 40 per cent. of their pupils in preparatory courses, the ratios for the remainder ranging from 1 to 37.

Of the public high schools one, namely, the Boston Public Latin School, had 100 per cent. of its pupils in preparatory courses; one, the North Brookfield High School, 75 per cent.; two others reported, one 30 per cent., the other 40 per cent.; nine others between 20 and 30 per cent., while for the remainder the ratios were less than 20 per cent.

The statistics for the country at large have the same general bearing as those for Massachusetts. They show a much larger proportion of pupils in the private schools for boys preparing for college and for scientific schools than in the other classes of schools answering the inquiries. The percentages as reported were as follows: Public high schools, 10 per cent.; private schools for girls, 2 per cent.; private schools for both sexes, 7 per cent.; private schools for boys, 32 per cent.

The inquiries of the Office as to the scholastic work of secondary schools for the present year were directed to the following particulars: First, the amount and character of special training; second, the relative time devoted to the principal studies of the general curriculum, and the number of students pursuing each. The special training is of two classes,—commercial or business, and the professional training of teachers. The statistics relating to these particulars are summarized in Chapters IX and XVI, treating of the specified particulars.

The information elicited by the inquiries relative to curriculum and the division of time in private secondary schools has been summarized in Tables 36 and 37.

For convenience of reference and study the corresponding information from public high schools is summarized in the tables immediately following, viz, 38 and 39.

TABLE 35.—*Number and Classification of Students in Specified Branches and Courses for all Private Secondary Schools.*

Total number of students distributed.....	73,031	Percentage pursuing—	
Number pursuing—		English language and literature.....	51.17
English language and literature.....	37,399	Latin.....	23.83
Latin.....	17,414	Greek.....	5.57
Greek.....	4,076	French.....	11.03
French.....	8,060	German.....	13.06
German.....	9,547	Mathematics.....	67.21
Mathematics.....	49,117	Physics.....	13.08
Physics.....	9,562	Chemistry.....	6.01
Chemistry.....	4,398	Other sciences.....	16.43
Other sciences.....	12,047	Percentage preparing for college and	
Preparing for classical course in college..	7,205	scientific school.....	11
Preparing for scientific course in college		Percentage of total preparing for college	
or scientific school.....	4,113	and scientific school—	
Total preparing for college and scientific		In classical course.....	53
school.....	13,593	In scientific course.....	30
		Not specified.....	17

TABLE 36.—COMPARATIVE STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS.

DIVISION A.—Private Schools for Girls.

States.	Number of Schools Reporting. Number Answering the Inquiries Respecting Studies.		Total Number of Students.	Percentage of Students Pursuing—								
				English Language and Literature.	Latin.	Greek.	French.	German.	Mathematics.	Physics.	Chemistry.	Other Sciences.
NORTH ATLANTIC DIVISION.												
New Hampshire.....	1	1	57	77	18	.....	86	83	44	32	.....	26
Vermont.....	1	1	22	.....	27	.....	100	.....	.....	.....	.....	.....
Massachusetts.....	20	12	563	62	47	5	55	24	71	14	5	20
Rhode Island.....	1	1	37	11	86	.....	100	19	21	.....	.....	.....
Connecticut.....	7	2	123	12	16	.....	43	9	59	8	5	8
New York.....	33	21	1,463	57	30	2	53	26	78	14	4	26
New Jersey.....	9	8	441	66	31	2	39	12	89	13	11	27
Pennsylvania.....	17	11	687	63	27	.....	29	18	79	16	6	20
SOUTH ATLANTIC DIVISION.												
Maryland.....	6	5	564	23	15	.....	25	24	50	22	5	23
District of Columbia.....	5	3	315	33	14	.....	60	6	50	15	15	5
Virginia.....	9	6	343	81	27	.....	22	15	80	27	18	20
West Virginia.....	2	1	60	67	20	.....	3	17	50	28	8	35
North Carolina.....	5	2	323	79	14	.....	1	1	98	3	2	21
Georgia.....	7	4	399	29	33	.....	37	6	50	12	17	31
SOUTH CENTRAL DIVISION.												
Kentucky.....	6	3	189	89	22	.....	9	1	100	18	15	29
Tennessee.....	5	2	220	27	39	1	9	6	53	32	20	19
Mississippi.....	1	1	50	8	22	.....	6	.....	18	6	4	.....
Louisiana.....	5	3	290	43	5	.....	42	4	45	9	10	16
Texas.....	7	3	619	16	15	.....	2	4	84	7	7	12
Indian Territory.....	3	2	163	97	2	.....	.....	.....	79	.....	.....	22
NORTH CENTRAL DIVISION.												
Ohio.....	9	4	303	35	5	.....	33	20	43	18	1	32
Indiana.....	5	2	436	15	.....	.....	14	7	93	1	1	8
Illinois.....	10	8	1,233	36	11	.....	26	17	82	7	5	22
Michigan.....	1	1	51	13	6	.....	25	13	24	8	10	33
Wisconsin.....	3	1	120	10	.....	.....	2	75	.....	.....	.....	.....
Iowa.....	3	1	110	68	18	.....	29	32	64	9	9	27
Missouri.....	10	7	548	44	16	.....	18	5	83	12	9	23
Nebraska.....	2	1	110	45	9	.....	89	18	91	18	11	55
WESTERN DIVISION.												
Colorado.....	1	1	150	20	40	.....	30	33	93	17	20	.....
Washington.....	1	1	144	35	28	.....	7	25	46	7	7	47
California.....	8	6	921	55	6	.....	26	8	51	12	4	11
North Atlantic Division.....	91	57	3,403	53.24	32.24	19.10	47.89	21.43	76.23	14.37	5.49	23.04
South Atlantic Division.....	34	21	2,009	43.08	20.91	.....	15	27.74	62.97	16.77	10.75	22.60
South Central Division.....	27	14	1,531	50.88	17.63	.....	02	11.70	60.15	11.75	9.21	11.75
North Central Division.....	43	25	3,006	34.53	91.15	.....	25.35	16.73	74.65	8.54	4.92	22.02
Western Division.....	10	8	1,215	56.46	12.42	.....	24.03	14.73	56.21	11.93	6.17	13.74
United States.....	208	125	11,164	47.43	19.81	.....	67	30.63	15.34	71.19	12.61	20.13

TABLE 36.—COMPARATIVE STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS—Continued.

DIVISION B.—*Private Schools for Boys.*

States.	Number of Schools Reporting.	Number Answering the Inquiries Respecting Studies.	Total Number of Students.	Percentage of Students Pursuing—								
				English Language and Literature.	Latin.	Greek.	French.	German.	Mathematics.	Physics.	Chemistry.	Other Sciences.
NORTH ATLANTIC DIVISION.												
Maine.....	2	1	30	23	47	10	10	0	90	13	3	.....
Vermont.....	1	1	39	.....	31	10	15	.....	100	25	13	.....
Massachusetts.....	19	11	1,094	59	46	35	24	12	70	14	5	9
Rhode Island.....	4	3	516	76	29	14	16	1	47	5	3	29
Connecticut.....	11	8	369	59	51	15	12	19	93	16	3	20
New York.....	49	24	1,504	65	51	19	38	23	78	15	10	8
New Jersey.....	17	12	974	60	45	19	29	28	82	17	10	26
Pennsylvania.....	19	14	1,139	82	46	16	16	30	65	21	5	10
SOUTH ATLANTIC DIVISION.												
Maryland.....	16	12	726	64	43	9	14	37	90	29	13	7
District of Columbia.....	5	1	16	.....	56	.....	.....	.....	19	31	2	.....
Virginia.....	15	11	670	66	68	14	23	18	98	32	13	14
West Virginia.....	1	1	50	100	54	22	22	30	100	.....	.....	.....
North Carolina.....	14	13	911	52	44	11	5	5	75	9	5	5
South Carolina.....	4	3	260	84	86	11	48	25	95	24	3	3
Georgia.....	10	5	424	56	26	10	.....	2	74	10	.....	25
SOUTH CENTRAL DIVISION.												
Kentucky.....	8	7	296	66	49	16	4	19	86	40	8	20
Tennessee.....	2	1	127	100	31	12	0	9	100	13	12	.....
Alabama.....	7	7	448	81	36	8	.....	.....	97	6	13	12
Mississippi.....	2	1	51	.....	24	0	6	0	100	12	6	22
Louisiana.....	3	2	392	100	4	1	28	5	100	30	7	5
Indian Territory.....	2	1	180	100	27	.....	.....	.....	100	12	12	5
NORTH CENTRAL DIVISION.												
Ohio.....	5	2	82	73	89	35	24	74	90	24	24	82
Illinois.....	9	4	345	90	46	25	7	54	100	25	10	53
Michigan.....	1	1	141	48	20	2	6	22	84	12	9	.....
Wisconsin.....	8	4	497	77	73	32	11	64	66	16	4	33
Minnesota.....	3	1	204	69	36	6	0	15	100	16	7	31
Iowa.....	2	1	59	100	85	12	.....	100	25	20	5	75
Missouri.....	7	7	698	56	32	5	3	51	76	14	4	11
WESTERN DIVISION.												
Colorado.....	2	1	54	100	80	30	6	30	96	59	.....	.....
New Mexico.....	3	2	272	87	7	7	4	5	85	1	1	7
Oregon.....	2	1	120	.....	33	12	4	10	.....	8	4	10
California.....	9	4	838	59	9	3	4	5	44	21	7	13
North Atlantic Division.....	122	74	5,665	66.62	45.75	20.78	25.33	20.69	73.10	15.76	7.16	14.07
South Atlantic Division.....	65	46	3,057	61.40	50.44	10.33	14.59	17.30	85.21	20.15	7.49	10.00
South Central Division.....	24	19	1,494	82.19	28.46	7.85	9.47	6.62	95.96	21.46	5.67	24.50
North Central Division.....	35	20	2,226	67.83	46.70	15.13	5.93	51.48	79.55	12.17	6.29	29.87
Western Division.....	16	8	1,284	61.38	13.55	5.46	4.21	6.69	50.78	14.72	5.30	10.90
United States.....	262	167	13,726	66.65	42.23	14.90	16.17	22.29	76.90	17.35	7.16	16.46

TABLE 36.—COMPARATIVE STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS—Continued.

DIVISION C.—Private Schools for Both Sexes.

States,	Number of Schools Reporting.	Number Answering the Inquiries Respecting Studies.	Total Number of Students.	Percentage of Students Pursuing—								
				English Language and Literature.	Latin.	Greek.	French.	German.	Mathematics.	Physics.	Chemistry.	Other Sciences.
NORTH ATLANTIC DIVISION.												
Maine.....	15	10	1,392	47	36	12	8	3	50	16	9	22
New Hampshire.....	17	12	835	33	29	4	6	.....	84	20	7	23
Vermont.....	15	8	1,445	43	24	8	9	3	81	10	6	20
Massachusetts.....	37	28	2,214	43	27	6	13	9	67	19	10	21
Rhode Island.....	3	2	153	99	92	33	65	13	91	30	25	50
Connecticut.....	14	9	761	74	41	10	21	14	69	12	7	11
New York.....	70	53	5,535	30	15	3	4	9	46	10	5	15
New Jersey.....	13	9	1,783	73	14	6	10	47	44	10	3	1
Pennsylvania.....	41	30	5,498	47	32	5	9	12	61	17	11	27
SOUTH ATLANTIC DIVISION.												
Delaware.....	3	3	441	26	30	3	1	6	63	9	6	7
District of Columbia.....	2	2	125	.....	26	2	23	2	100	46	46	31
Virginia.....	6	3	324	95	5	.....	1	.....	92	2	2	1
North Carolina.....	44	22	2,298	62	21	4	2	5	63	10	1	9
South Carolina.....	5	3	837	12	8	1	.....	1	20	1	.....	6
Georgia.....	63	39	3,957	53	17	2	3	1	59	10	5	9
Florida.....	7	5	538	87	23	1	7	2	97	13	4	6
SOUTH CENTRAL DIVISION.												
Kentucky.....	19	9	830	33	16	3	4	13	53	11	7	11
Tennessee.....	29	20	2,790	62	10	3	1	2	61	5	3	17
Alabama.....	23	12	1,779	52	17	2	1	7	74	8	5	16
Mississippi.....	10	5	725	25	17	2	4	.....	53	19	3	19
Louisiana.....	5	3	324	23	5	1	37	12	56	10	10	8
Texas.....	14	11	2,029	50	18	5	2	5	66	13	6	21
Arkansas.....	10	6	759	63	12	.....	1	.....	67	6	2	9
NORTH CENTRAL DIVISION.												
Ohio.....	19	15	1,196	45	31	9	2	11	70	9	5	19
Indiana.....	9	4	373	49	34	4	.....	6	64	2	1	19
Illinois.....	20	10	1,457	64	8	1	2	50	33	9	6	6
Michigan.....	4	4	416	71	30	.....	13	43	56	29	29	41
Wisconsin.....	5	4	560	5	23	2	.....	14	41	11	4	11
Minnesota.....	8	6	753	56	27	9	.....	22	76	22	5	37
Iowa.....	24	9	833	30	19	2	.....	12	30	12	3	8
Missouri.....	25	19	2,303	51	17	3	4	8	71	26	6	13
Dakota.....	11	7	742	29	11	5	1	9	71	4	1	9
Nebraska.....	5	4	274	53	15	3	.....	4	85	12	.....	29
Kansas.....	7	4	1,269	27	18	6	.....	13	62	4	1	17
WESTERN DIVISION.												
Colorado.....	3	2	153	16	13	3	.....	5	69	29	8	34
New Mexico.....	6	2	173	6	8	1	.....	.....	8	6	.....	.....
Utah.....	10	3	671	17	3	.....	.....	1	43	1	1	5
Washington.....	9	5	349	66	8	5	.....	1	89	3	.....	13
Oregon.....	7	6	590	75	8	1	.....	7	61	5	2	23
California.....	11	4	392	81	5	.....	8	.....	71	8	2	33
North Atlantic Division.....	230	146	18,111	45.32	24.63	5.94	9.35	12.31	57.70	13.26	7.38	12.58
South Atlantic Division.....	132	75	8,520	52.93	17.84	2.35	2.95	2.26	61.20	9.45	3.87	8.03
South Central Division.....	110	66	9,236	50.77	14.32	2.82	2.91	4.51	63.40	10.35	4.53	16.30
North Central Division.....	147	83	10,176	44.47	19.53	4.08	2.65	18.80	59.87	13.75	5.03	16.80
Western Division.....	46	22	2,323	43.80	6.36	1.42	1.04	2.45	59.10	6.06	2.07	16.92
United States.....	665	395	43,371	47.69	19.60	4.09	5.06	9.95	59.94	11.99	5.43	15.65

TABLE 37.—*Distribution of Time among Specified Studies*

			Classical Course.					
			Total Number of Hours.	Percentage of Time Assigned to—				
				English Language and Literature.	Latin.	Greek.	French.	German.
Name of School.	Location.							
1	High School for Boys.....	Anniston, Ala.....	1,944	28	18.5	.....	.....	.....
2	Towle's Institute for Boys....	Mobile, Ala.....	4,184	18.9	15.1	.....	.....	.....
3	Wilson Grammar School.....	Middletown, Conn.....	3,648	10.5	26	15.6	.....	9.5
4	DeLand University.....	DeLand, Fla.....	3,120	15.4	20.5	15.4	10.2	10.2
5	East Florida Seminary.....	Gainesville, Fla.....	1,152	.....	33.3	22.3	.....	.....
6	Seminary West of the Suwannee River.	Tallahassee, Fla.....	1,264	17.6	17.6	.....	17.6	17.6
7	South Georgia Male and Female College.	Dawson, Ga.....	2,300	17.4	17.4	17.4	8.8	8.8
8	Georgia School of Languages, Science and Art.	Norcross, Ga.....	2,860	23	21	21	.....	.....
9	St. Joseph's Academy.....	Washington, Ga.....	.....	.....	.....	.....	.....	.....
10	Fort Smith District High School.	Booneville, Ark.....	2,700	26.7	26.6	.....	.....	.....
11	Sacred Heart College.....	San Francisco, Cal.....	6,760	23.7	11.8	11.8	11.8	11.8
12	German-American Academy	Chicago, Ill.....	3,480	23	23	.....	14	14
13	Evangelical Pro-seminary...	Elmhurst, Ill.....	4,360	18.4	18.4	13.8	.....	18.4
14	Morgan Park Military Academy.	Morgan Park, Ill.....	2,772	13.6	13.6	13.6	9.1	9.1
15	Indianapolis Institute.....	Indianapolis, Ind.....	5,265	37	.....	.....	11	11
16	Vincennes University.....	Vincennes, Ind.....	2,515	.....	30.2	15.1	.....	15.1
17	Wartburg College.....	Waverly, Iowa.....	4,120	19.5	29.1	17.5	.....	19.5
18	Lewis Academy.....	Wichita, Kans.....	63,040	18.7	18.7	18.7	.....	18.7
19	Male and Female High School.	Winchester, Ky.....	4,800	16.7	16.7	12.5	16.7	8.4
20	Hampden Academy.....	Hampden, Me.....	3,240	18	13	.....	4.5	4.5
21	McDonogh Institute.....	McDonogh, Md.....	.....	.....	.....	.....	.....	.....
22	St. George's Hall for Boys...	St. George, Md.....	6,320	17.8	12.6	12.6	9.5	9.5
23	Powers Institute.....	Bernardston, Mass.....	4,320	16.7	16.7	16.7	.....	12.3
24	Nichols Academy.....	Dudley, Mass.....	1,938	.....	31.4	23.8	5.9	.....
25	Partridge Academy.....	Duxbury, Mass.....	1,760	13.5	13.5	13.5	.....	.....
26	Williston Seminary.....	Easthampton, Mass.....	3,929	19.4	19.4	14.4	5.8	5.8
27	Arms Academy.....	Shelburne Falls, Mass.....	3,600	24	12	6	6	6
28	Thayer Academy.....	South Braintree, Mass.....	3,572	21.3	21.3	21.3	3.1	3.1
29	Highland Military Academy	Worcester, Mass.....	3,034	24.4	29.2	.....	9.8	.....
30	Michigan Military Academy	Orchard Lake, Mich.....	1,980	18.2	36.4	18.2	.....	.....
31	Shattuck School.....	Faribault, Minn.....	2,220	.....	33.3	25	.....	.....
32	Jefferson College.....	Washington, Miss.....	1,450	.....	27.6	.....	13.8	.....
33	Kemper Family School.....	Boonville, Mo.....	2,698	11.2	28.2	21	.....	17
34	Wentworth Male Academy.....	Lexington, Mo.....	1,440	28	20.8	14	.....	.....
35	Shelbina Collegiate Institute.	Shelbina, Mo.....	2,324	13.9	23	.....	11.5	11.5
36	Brewster Free Academy.....	Wolfsborough, N. H.....	2,925	6.7	26.2	20.2	6.7	6.7
37	Academic Department of the German Theological School of Newark, N. J.	Bloomfield, N. J.....	2,736	15.8	21	15.8	.....	21
38	Mount Holly Academy.....	Mount Holly, N. J.....	3,740	26	24.6	24.6	12.3	12.3
39	Bainbridge Academy.....	Bainbridge, N. Y.....	2,065	3.1	39	29	.....	.....
40	Adelphi Academy.....	Brooklyn, N. Y.....	3,600	13.3	16.7	16.7	17.8	17.8
41	Parker Union School.....	Clarence, N. Y.....	23,240	10.9	20	.....	10	10
42	Cottage Seminary.....	Clinton, N. Y.....	2,697	17	14	10	13	15
43	Greenwich Union School.....	Greenwich, N. Y.....	2,127	22	22	11	.....	.....
44	Woodbridge School.....	New York, N. Y.....	1,728	14.8	14.8	.....	11	.....
45	Peekskill Military Academy.	Peekskill, N. Y.....	2,680	17.9	30	22.4	.....	.....
46	Worrall Hall.....	Peekskill, N. Y.....	2,400	33.3	16.7	.....	16.7	.....
47	Seymour Smith Academy.....	Pine Plains, N. Y.....	1,710	.....	44.4	22.2	.....	.....
48	Bingham School.....	Bingham School, N. C.....	3,800	21.7	21.7	14.5	10.6	10.6
49	Kinston College.....	Kinston, N. C.....	1,800	15.4	23.1	.....	.....	12.3
50	Littleton Female College.....	Littleton, N. C.....	3,360	14.3	14.3	.....	14.3	14.3
51	St. Francis Gymnasium.....	Cincinnati, Ohio.....	4,600	8.7	26.2	7	5.3	8.8
52	Green Spring Academy.....	Green Spring, Ohio.....	2,710	.....	29.5	22.3	.....	29.5
53	Harlem Springs College.....	Harlem Springs, Ohio.....	2,212	.....	28.9	21	.....	16
54	Wasco Independent Academy.	The Dalles, Oregon.....	2,788	19.1	19.1	12	12	12
55	Germantown Academy.....	Germantown, Pa.....	3,420	27.7	13.8	8.4	8.4	8.4
56	Inglisde Academy.....	McDonald, Pa.....	1,872	12.5	25	25	.....	.....

a G indicates school for girls; B, school for boys; M, school for both sexes.

in certain Private Schools reporting Four Years' Courses.

Classical Course.				Scientific Course.										Classification of School. ^a	
Percentage of Time Assigned to—				Total Number of Hours.	Percentage of Time Assigned to—										
Mathematics.	Physics.	Chemistry.	Other Sciences.		English Language and Literature.	Latin.	Greek.	French.	German.	Mathematics.	Physics.	Chemistry.	Other Sciences.		
46.3	3.7	3.7	.....	1,944	28	18.5	.....	.....	.....	46.3	3.7	3.7	.....	B....	1
23.6	14.4	14.4	14.4	3,783	15.5	12.4	.....	.....	.....	25.7	15.5	15.5	15.5	B....	2
26	.....	.....	12.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B....	3
20.5	2.6	2.6	2.6	3,120	15.4	20.5	15.4	10.2	10.2	20.5	2.6	2.6	2.6	M....	4
44.4	.....	.....	.....	1,472	34.8	26.2	.....	.....	.....	34.8	2.1	2.1	.....	M....	5
17.6	4.5	4.5	3	1,264	17.6	17.6	.....	17.6	17.6	17.6	4.5	4.5	3	M....	6
.....
17.4	4.3	4.3	4.3	2,300	17.4	17.4	17.4	8.8	8.8	17.4	4.3	4.3	4.3	M....	7
17.4	5.2	5.2	2.2	4,600	17.4	.....	.....	13.1	13.1	17.4	17.4	17.4	4.3	M....	8
.....
26.6	6.7	6.7	6.7	3,960	15.1	12	.....	20.2	.....	40	4.2	4.2	4.3	G....	9
.....	.....	.....	.....	2,700	26.7	26.6	.....	.....	.....	26.6	6.7	6.7	6.7	M....	10
.....
14.8	5.4	3.5	5.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B....	11
23	2.3	1.2	.....	3,360	23.8	14.2	.....	14.2	14.2	23.8	4.9	4.9	.....	M....	12
13.8	3.7	.....	13.8	3,360	29.7	.....	.....	.....	23	20	4.3	.....	23	B....	13
23	4.6	4.6	9.1	2,142	22.9	.....	.....	11.7	11.7	30	6	6	11.7	B....	14
.....
19	11	.....	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G....	15
30.2	5.4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M....	16
8.7	1.9	1.9	1.9	1,760	36.4	13.6	.....	.....	27.4	13.6	4.5	.....	4.5	B....	17
18.7	3.2	3.3	.....	3,040	18.7	18.7	.....	18.7	18.7	18.7	3.2	3.3	.....	M....	18
16.7	4.2	4.2	4.2	4,800	16.7	16.7	12.5	16.7	8.4	16.7	4.2	4.2	4.2	M....	19
.....
18	18	4.5	2	4,248	13.6	13.6	13.6	13.6	13.6	13.6	13.6	3.4	1.7	M....	20
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B....	21
9.5	9.5	9.5	9.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B....	22
12.3	12.3	12.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B....	23
39.2	.....	.....	.....	1,408	9	.....	.....	16.2	.....	54	10.8	6.5	4	M....	24
18.5	18.5	9	13.5	1,440	16.7	.....	11.1	.....	.....	22.2	22.2	11.1	16.7	M....	25
19.4	4.8	6.2	4.8	3,929	19.4	19.4	14.4	5.8	5.8	19.4	4.8	6.2	4.8	B....	26
22	2.7	2.7	1	3,000	24	24	12	6	6	22	2.7	2.7	1	M....	27
21.3	5.3	2.1	1.2	3,306	23	11.5	23	3.5	7	23	5.7	2.3	1.2	M....	28
24.4	6.1	6.1	.....	2,146	34.5	.....	.....	13.8	.....	34.5	8.6	8.6	.....	B....	29
27.2	.....	.....	.....	2,489	20	14.5	.....	14.5	14.5	21.5	7	2	6	B....	30
41.7	.....	.....	.....	3,275	28.3	11.3	.....	.....	11.3	28.3	8	9.3	3.9	B....	31
41.4	6.9	6.9	3.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B....	32
22.6	.....	.....	.....	1,216	25	.....	.....	.....	.....	50	12.5	12.5	.....	B....	33
28	3.5	2.1	4.2	1,080	16.7	16.7	5.5	.....	11	37	5	2.8	5.5	B....	34
28.6	2.9	2.9	5.7	1,790	18	30	.....	.....	.....	37	3.8	3.7	7.5	M....	35
20.2	6.7	6.7	.....	4,180	18.7	14	.....	14	14	18.7	9.3	9.3	2	M....	36
15.8	.....	.....	10.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B....	37
.....
24.6	.....	.....	.....	3,555	21.9	10.4	.....	20.8	20.8	20.8	4.3	.....	.....	B....	38
29	.....	.....	.....	3,060	17	26	20	.....	6.5	19.5	4.5	.....	6.5	M....	39
17.8	.....	.....	.....	5,120	12.5	15.6	15.6	12.5	12.5	12.5	6.2	6.3	6.3	M....	40
14.8	14.8	14.8	14.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M....	41
25	2	1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G....	42
22	3.2	3.2	16.6	2,127	22	22	11	.....	.....	22	3.2	3.2	16.6	M....	43
44.6	11	3.8	.....	1,536	16.7	8.4	.....	12.6	8.4	42	8.4	4.2	.....	B....	44
30	.....	.....	.....	4,240	11.3	19	.....	19	19	19	4.7	5.7	3	B....	45
18.7	16.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B....	46
33.4	.....	.....	.....	1,715	11.4	.....	.....	.....	33.3	33.3	11.1	.....	11.1	M....	47
22.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B....	48
30.8	12.3	.....	6.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M....	49
14.3	7.1	7.1	14.3	3,360	14.3	14.3	.....	14.3	14.3	14.3	7.1	7.1	14.3	G....	50
8.8	2.6	2.6	30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B....	51
14.7	4	.....	.....	2,310	17.6	25.5	.....	.....	34.6	17.6	.....	4.7	.....	M....	52
28.9	4.3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M....	53
16.7	.....	9.4	.....	1,931	27.6	20.7	.....	.....	.....	25	.....	27.6	.....	M....	54
.....
27.7	5.6	.....	.....	3,420	27.7	13.8	8.4	8.4	8.4	27.7	5.6	.....	.....	B....	55
25	.....	.....	12.5	1,735	13.4	26.6	20	.....	.....	26.6	.....	.....	13.4	M....	56

^b Three years' course.

^c Classical or scientific course.

TABLE 37.—*Distribution of Time among Specified Studies in*

	Name of School.	Location.	Classical Course.					
			Total Number of Hours.	Percentage of Time Assigned to—				
				English Language and Literature.	Latin.	Greek.	French.	German.
57	William Penn Charter School	Philadelphia, Pa.....	4,572	29.9	17.4	11.8	4.7	.....
58	Rogers High School.....	Newport, R. I.....	3,042	15.4	25.6	19.2	11.5	7.7
59	High School of Charleston ...	Charleston, S. O.....	3,880	20.6	20.6	12.4	12.4	9.2
60	Bishop College.....	Marshall, Tex.....	3,140	22.9	17.2	11.5	.....	11.5
61	St. Johnsbury Academy.....	St. Johnsbury, Vt.....	3,630	22	22	11.5	11	11
62	Vermont Academy.....	Saxton's River, Vt.....	3,627	18.3	19.1	15.1	15.1	15.1
63	Pantops Academy.....	Charlottesville, Va.....	4,400	18.2	18.2	18.2	10.9	10.9
64	Seven Islands School.....	New Canton, Va.....	4,140	13	17.4	13	13	.....
65	Marquette College.....	Milwaukee, Wis.....	4,854	15.6	23.5	23.5	.....	5.6
66	Milwaukee Academy.....	Milwaukee, Wis.....	4,120	15.5	19.7	14.5	9.5	9.5

The foregoing table presents in part the results of an inquiry respecting the time assigned to the specified studies in systematized courses of secondary instruction. The inquiry called for the number of hours in a week assigned to each study, the number of weeks in a year, and the number of years in the course.

On account of different interpretations put upon the inquiry and the different conditions existing where the interpretations were the same, it was impossible to embody all the information elicited in a single tabular scheme.

Choice has here been made of answers relating to courses of four or of five years' duration, which are the periods generally comprised in secondary instruction.

In selecting the answers for tabulation it was necessary also to distinguish between those that pertained to the work of a class as arranged for a continuous course and those that evidently gave the time devoted by all classes to the several studies or the time occupied by the teachers of those studies. The distinction was indicated by the total number of hours making up the school week. The choice was farther limited to the reports which included the three lines of study embraced in the inquiry, viz, language, mathematics, and physical science.

The reports of seventy-five schools accorded with the basis of choice thus determined. Of these nine made equal division of time among the several studies. The relative distribution of time for the remainder is shown in Table 37. The total number of hours tabulated was found by multiplying the number of hours assigned to each study in a week by the number of weeks it is pursued in a year, and the number of years in the course, and adding the products.

The plan here described was followed also in the preparation of Table 39, which presents the corresponding information for seventy-one public high schools. The few departures from the length of the course selected are indicated by foot-notes.

certain Private Schools reporting Four Years' Courses—Continued.

Classical Course.				Scientific Course.										Classification of School. ^a	
Percentage of Time Assigned to—				Total Number of Hours.	Percentage of Time Assigned to—										
Mathematics.	Physics.	Chemistry.	Other Sciences.		English Language and Literature.	Latin.	Greek.	French.	German.	Mathematics.	Physics.	Chemistry.	Other Sciences.		
18.8	3.2	.....	14.2	4,644	29.5	6.2	.....	15.5	11.6	18.6	3.1	3.1	12.4	B....	57
15.4	3.8	.....	1.4	3,193	14.6	24	18	10.8	7.5	14.6	3.6	4.9	2	M....	53
20.6	4.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B....	59
22.9	2.6	.....	11.5	2,780	23	19	.....	.....	11.6	23	2.5	.....	11.6	M....	60
16.5	4.1	2.2	.....	2,630	22	22	11.5	11	11	16.5	4.1	2.2	.....	M....	61
17.3	.....	.....	.....	3,012	25	17.4	.....	12.1	12.1	20.7	2	3.5	7.2	M....	62
18.2	2.7	2.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B....	63
17.5	8.7	8.7	8.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B....	64
12.6	9.6	9.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B....	65
19.4	5.8	1	5.1	3,920	16.4	20.4	.....	15.3	15.3	20.4	6.1	1	5.1	B....	66

^a B indicates school for boys; M school for both sexes.

TABLE 38.—*Public High Schools.*

States.	Number of Schools reporting.	Total Number of Students.	Percentage of Students Pursuing—								
			English Language and Literature.	Latin.	Greek.	French.	German.	Mathematics.	Physics.	Chemistry.	Other Sciences.
1	2	3	4	5	6	7	8	9	10	11	12
NORTH ATLANTIC DIVISION.											
Maine.....	11	1,375	79.80	42.60	12.19	37.71	.69	83.30	33.02	20.50	42.41
New Hampshire.....	5	700	58.71	58.14	11	16.71	.....	74.71	27.71	18.57	30.57
Vermont.....	2	200	49	31.50	4	10.50	.....	100	34.50	22	30.50
Massachusetts.....	45	7,449	61.90	46.68	9.13	29.79	8.55	68.13	28.31	15.72	32.13
Rhode Island.....	5	888	87.39	57.77	12.95	21.51	2.59	87.84	38.96	15.65	33.11
Connecticut.....	5	996	76.40	59.53	10.94	5.02	33.63	97.79	22.49	13.45	27.21
New York.....	33	7,467	42.72	32.02	3.96	2.48	16.75	79.17	19.48	6.75	30.67
New Jersey.....	9	2,221	41.47	35.43	1.58	.....	7.16	97.07	40.43	26.16	18.78
Pennsylvania.....	33	4,290	57.65	42.08	2.33	1.21	22.96	96.90	34.66	16.80	27.20
SOUTH ATLANTIC DIVISION.											
Delaware.....	1	253	15.81	32.41	.....	.....	.....	32.41	16.60	11.85	8.69
Maryland.....	1	82	100	84.14	10.97	.....	30.48	100	100	.....	.....
District of Columbia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Virginia.....	6	1,264	97.63	81.72	.....	9.81	22.31	100	37.26	24.92	75.79
West Virginia.....	1	60	100	15	.....	.....	.....	100	33.33	.....	33.33
North Carolina.....	1	25	100	100	4	.....	.....	100	36	.....	32
South Carolina.....	1	251	58.96	.....	.....	58.96	.....	100	58.96	58.96	.....
Georgia.....	2	4,007	100	9.75	.2	.3	.....	100	4.04	2.60	.....
Florida.....	1	75	100	6.67	1.33	6.67	.....	100	16	.....	.....
SOUTH CENTRAL DIVISION.											
Kentucky.....	3	322	78.88	75.15	.....	.....	.....	99.38	33.54	.....	83.23
Tennessee.....	2	246	91.46	91.46	.....	.....	19.11	97.56	21.95	.....	74.39
Alabama.....	5	1,436	83.70	28.13	2.08	1.46	3.13	99.65	19.15	16.36	24.16
Mississippi.....	1	70	100	.....	.....	.....	.....	100	42.85	42.85	.....
Louisiana.....	1	373	100	59.78	.....	.....	.....	100	49.06	26.80	87.13
Texas.....	6	414	72.71	58.45	.....	4.59	25.84	93.48	41.80	10.38	44.93
Arkansas.....	2	151	96.68	49.66	.....	2.65	.....	87.41	44.37	17.94	97.35
NORTH CENTRAL DIVISION.											
Ohio.....	29	7,010	29.27	54.91	2.91	4.45	22.15	95.16	22.09	13.99	39.90
Indiana.....	18	2,118	77.85	35.65	.42	.33	21.8	95.23	21.81	7.83	35.93
Illinois.....	20	4,421	83.19	43.02	1.04	3.82	24.59	78.33	21.83	15.52	58.02
Michigan.....	25	4,806	43.63	35.25	3.68	52.85	15.39	84.20	14	5.93	40.65
Wisconsin.....	19	2,666	54.20	23.59	4.13	8.55	31.66	77.91	20.71	7.39	27.46
Minnesota.....	5	1,321	14.16	34.97	.75	8.63	25.96	70.74	37.69	2.12	17.56
Iowa.....	12	1,765	69.63	27.71	.45	.96	6.45	89.57	34.33	23.74	61.19
Missouri.....	10	1,991	90.11	49.87	3.26	3.57	9.79	71.87	42.54	13.71	31.84
Dakota.....	1	65	16.92	83.07	.....	.....	.....	63.07	63.07	18.46	27.69
Nebraska.....	7	1,017	73.45	27.53	3.54	.....	22.52	77.19	23.20	9.14	48.77
Kansas.....	10	999	75.97	43.84	1.30	.....	7.87	90.9	26.72	5.21	25.22
WESTERN DIVISION.											
Montana.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wyoming.....	1	57	100	.....	.....	.....	.....	100	100	100	100
Colorado.....	2	83	22.88	72.28	.....	.....	.....	100	14.45	4.82	12.04
New Mexico.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Arizona.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nevada.....	1	79	100	.....	.....	.....	.....	100	50.63	15.19	100
Idaho.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oregon.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
California.....	5	1,371	99.12	26.76	4.37	3.50	1.45	99.41	23.34	20.27	26.84
North Atlantic Division.....	148	25,783	56.22	41.52	5.86	13.29	13.18	81.70	28.31	14.53	30.15
South Atlantic Division.....	14	6,017	94.24	26.71	.31	4.83	4.11	97.15	15.92	9.92	16.75
South Central Division.....	20	3,012	85.36	46.85	.99	1.46	6.60	98.04	29.48	14.44	48.34
North Central Division.....	156	23,179	55.54	40.97	2.41	4.15	20	84.99	23.76	11.33	40.88
Western Division.....	9	1,590	95.22	26.85	3.77	3.02	1.26	99.5	27	22.68	32.32
United States.....	347	64,584	61.78	39.79	3.55	7.71	14.82	85.81	25.19	12.88	34.49

TABLE 39.—*Distribution of Time among Specified Studies in certain Public High Schools reporting Four Years' Courses.*

Location of School.	Classical Course.												Scientific Course.							
	Percentage of Time Assigned to—												Percentage of Time Assigned to—							
	Total Number of Hours.	English Language and Literature.	Latin.	Greek.	French.	German.	Mathematics.	Physcs.	Chemistry.	Other Sciences.	Total Number of Hours.	English Language and Literature.	Latin.	Greek.	French.	German.	Mathematics.	Physcs.	Chemistry.	Other Sciences.
I	12	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
A.— <i>Cities whose Population is Less than 10,000.</i>																				
1 Helena, Ark.	2,880	25.00	25.00	25.00			18.75	6.25			41,611	40.23			11.17		6.70	5.59		35.31
2 Thomaston, Conn.	3,180	22.64	16.93				22.64	12.58			3,040	20.72				20.72	20.72	11.52	13.16	13.16
3 Valparaiso, Ind.	61,524	631.50	621.26			67.09	630.71	64.72			2,256	31.91	31.91				15.96	5.32	5.32	
4 Oskaloosa, Iowa	2,408	13.50	30.00	22.50	9.00		15.00	5.00	3.97		1,976	5.77					28.46	9.61	9.61	30.78
5 Calais, Me.	2,018	5.65	37.65	15.06			37.66	2.80			2,090	22.97	30.62		15.31		19.14	4.31		7.65
6 Eastport, Me.	2,675	29.91	29.91				14.95	3.60			1,680	47.62					47.62	4.76		
7 Hopkinton, Mass.	2,450	25.13	25.13		13.06		24.49	10.38			2,330	5.57	17.16			17.16	34.31	8.59	8.59	8.59
8 Melrose, Mass.	61,520	614.16	610.63	607.96	614.16	614.16	614.16	614.16	614.16	614.16	61,080	50.60					33.30	3.63	3.63	16.70
9 Plymouth, Mass.	1,785	10.38	41.46	10.38			20.73	3.51			2,185	24.21	33.83		15.06		28.20	2.40	3.39	21.22
10 Weymouth, Mich.	2,280	35.09	28.31		10.35		625.65	68.55	65.05		2,560	8.21	23.53	23.53		15.68	25.53	3.49		
11 Negaunee, Mich.	62,340	634.20				625.65	31.31				681	15.78					63.16	10.53		10.53
12 Wyandotte, Mich.	2,320	5.37	31.31	17.16							1,063	14.30			14.30	12.51	42.90	10.72	2.26	3.01
13 Ypsilanti, Mich.	2,385	19.09	26.42	11.32			30.18	1.80			1,280	12.50					62.50	12.50		
14 St. Cloud, Minn.	2,584	6.11	36.65	26.70			25.06	5.48			2,485	24.21					48.48	3.63		
15 Mexico, Mo.	2,820	9.33	28.37	28.37			14.18	14.18	4.97		2,560	8.21	23.53	23.53		15.68	25.53	3.49		
16 Claremont, N. H.	1,518	6.98	37.20	18.60			27.92	4.65			681	15.78					63.16	10.53		10.53
17 Batavia, N. Y.	65,472	613.16	626.31				621.05	66.58	66.58		1,063	14.30			14.30	12.51	42.90	10.72	2.26	3.01
18 Payetteville, N. C.	1,234	12.32	36.96				36.96	9.24			1,280	12.50					62.50	12.50		
19 Fremont, Ohio	2,080	7.69	38.47				38.46	7.69			1,280	12.50					62.50	12.50		
20 Marietta, Ohio																				
21 Norwalk, Ohio																				

bScientific course the same.

aThree years' course.

c Elective.

	Marlborough, Mass.	Orange, N. J.	4, 479	12.12	18.19	12.12	6.06	3.03	12.12	1, 530	23.53	23.53	11.77	5.87	23.53
39	Orange, N. J.	4, 479	12.12	24.24	18.19	12.12	6.06	3.03	12.12	1, 530	23.53	23.53	11.77	5.87	23.53
40	Dunkirk, N. Y.	63, 688	12.71	31.74	20.70	12.15	5.40	3.45	12.15	2, 268	23.81	23.81	7.93	7.93	23.81
41	Dunkirk, N. Y.	63, 688	12.71	31.74	20.70	12.15	5.40	3.45	12.15	2, 268	23.81	23.81	7.93	7.93	23.81
42	Dunkirk, N. Y.	63, 688	12.71	31.74	20.70	12.15	5.40	3.45	12.15	2, 268	23.81	23.81	7.93	7.93	23.81
43	Dover, N. H.	2, 208	12.71	31.74	20.70	12.15	5.40	3.45	12.15	2, 208	23.81	23.81	7.93	7.93	23.81
44	Newport, R. I.	2, 060	16.21	21.61	16.21	12.15	5.40	3.45	12.15	2, 060	23.81	23.81	7.93	7.93	23.81
45	Westport, R. I.	2, 320	13.79	27.59	20.68	12.15	5.40	3.45	12.15	2, 320	23.81	23.81	7.93	7.93	23.81
46	Waco, Tex.	6800	25.00	25.00	25.00	25.00	25.00	25.00	25.00	6800	25.00	25.00	25.00	25.00	25.00
47	Lynchburg, Va.	1, 944	18.52	23.15	18.52	18.52	18.52	18.52	18.52	1, 944	18.52	18.52	18.52	18.52	18.52
48	Appleton, Wis.	63, 280	24.40	24.40	24.40	24.40	24.40	24.40	24.40	63, 280	24.40	24.40	24.40	24.40	24.40
49	Racine, Wis.	63, 280	24.40	24.40	24.40	24.40	24.40	24.40	24.40	63, 280	24.40	24.40	24.40	24.40	24.40
<i>C.—Cities whose Pop- ulation is from 25,000 to 50,000.</i>															
50	Fort Wayne, Ind.	63, 220	24.10	24.10	24.10	24.10	24.10	24.10	24.10	63, 220	24.10	24.10	24.10	24.10	24.10
51	Lawrence, Mass.	4, 560	13.33	10.00	13.33	10.00	13.33	10.00	13.33	4, 560	13.33	13.33	13.33	13.33	13.33
52	Lynn, Mass.	2, 480	3.22	25.80	10.38	12.90	6.45	21.62	12.90	2, 480	25.80	25.80	25.80	25.80	25.80
53	Salem, Mass.	2, 220	36.04	36.04	36.04	36.04	36.04	36.04	36.04	2, 220	36.04	36.04	36.04	36.04	36.04
54	East Saginaw, Mich.	63, 220	24.10	24.10	24.10	24.10	24.10	24.10	24.10	63, 220	24.10	24.10	24.10	24.10	24.10
55	Grand Rapids, Mich.	63, 220	24.10	24.10	24.10	24.10	24.10	24.10	24.10	63, 220	24.10	24.10	24.10	24.10	24.10
56	Eric, Pa.	63, 220	24.10	24.10	24.10	24.10	24.10	24.10	24.10	63, 220	24.10	24.10	24.10	24.10	24.10
<i>D.—Cities whose Pop- ulation is from 50,000 to 100,000.</i>															
57	Los Angeles, Cal.	1, 116	32.26	32.26	32.26	32.26	32.26	32.26	32.26	1, 116	32.26	32.26	32.26	32.26	32.26
58	New Haven, Conn.	2, 960	3.40	27.03	27.03	27.03	27.03	27.03	27.03	2, 960	27.03	27.03	27.03	27.03	27.03
59	Winnington, Del.	3, 400	11.76	23.53	23.53	23.53	23.53	23.53	23.53	3, 400	23.53	23.53	23.53	23.53	23.53
60	Lowell, Mass.	3, 772	13.03	13.03	13.03	13.03	13.03	13.03	13.03	3, 772	13.03	13.03	13.03	13.03	13.03
61	Omaha, Neb.	2, 120	66.81	62.74	62.74	62.74	62.74	62.74	62.74	2, 120	66.81	66.81	66.81	66.81	66.81
62	Columbus, Ohio	63, 040	65.26	65.26	65.26	65.26	65.26	65.26	65.26	63, 040	65.26	65.26	65.26	65.26	65.26
63	Toledo, Ohio	2, 460	8.33	33.33	33.33	33.33	33.33	33.33	33.33	2, 460	33.33	33.33	33.33	33.33	33.33
64	Reading, Pa.	63, 220	24.10	24.10	24.10	24.10	24.10	24.10	24.10	63, 220	24.10	24.10	24.10	24.10	24.10
65	Charleston, S. C.	63, 220	24.10	24.10	24.10	24.10	24.10	24.10	24.10	63, 220	24.10	24.10	24.10	24.10	24.10
66	Richmond, Va.	63, 220	24.10	24.10	24.10	24.10	24.10	24.10	24.10	63, 220	24.10	24.10	24.10	24.10	24.10
<i>E.—Cities whose Popu- lation is above 100,000.</i>															
67	San Francisco, Cal.	2, 898	17.35	21.76	21.76	21.76	21.76	21.76	21.76	2, 898	21.76	21.76	21.76	21.76	21.76
68	Chicago, Ill.	63, 480	13.8	23.00	23.00	23.00	23.00	23.00	23.00	63, 480	23.00	23.00	23.00	23.00	23.00
69	New Orleans, La.	2, 185	26.08	26.08	26.08	26.08	26.08	26.08	26.08	2, 185	26.08	26.08	26.08	26.08	26.08
70	Minneapolis, Minn.	2, 094	20.63	20.63	20.63	20.63	20.63	20.63	20.63	2, 094	20.63	20.63	20.63	20.63	20.63
71	Jersey City, N. J.	4, 040	15.84	15.84	15.84	15.84	15.84	15.84	15.84	4, 040	15.84	15.84	15.84	15.84	15.84

a Scientific course the same.

b Three years' course.

c English Scientific.

d Six years' course, classical and scientific.

e Classical and scientific course.

STATISTICAL SUMMARY OF SCHOLARS IN SECONDARY SCHOOLS AND DEPARTMENTS

The principal statistics relating to endowed academies, seminaries, and other private schools for the present year are summarized in Table 40 and Table 41, Divisions A, B, and C. These show a total of 1,165 schools having 7,221 instructors and 126,721 scholars. In addition to the attendance upon these schools, scholars pursuing secondary courses in public high schools and in preparatory departments are reported as follows:

Class of School.	Number of Scholars.
Public high schools, Table 24.....	116,000
Preparatory departments of colleges and of seminaries for women, Table 43.....	6,202
Preparatory departments of colleges of liberal arts, Table 47.....	27,203
Preparatory departments of colleges endowed with the national land grant, Table 52...	1,431
Preparatory departments of schools of science, Table 56.....	562
Total.....	151,412

This gives, with the scholars in private schools, a sum total of 278,133.

The following shows the number of endowed academies, seminaries, and other private secondary schools, reporting to this Office each year from 1878 to 1888 inclusive (1883 omitted), with the number of instructors and students. It should be noted that on account of the exclusion of all public schools, the statement for years preceding 1888 differs from the corresponding statements published in previous Reports.

No. of—	1878.	1879.	1880.	1881.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.
Institutions	1,298	1,308	1,337	1,406	1,581	1,695	1,714	1,521	1,031	1,165
Instructors	6,402	6,574	6,635	7,096	8,241	8,862	8,986	8,533	5,923	7,221
Students	107,633	118,037	117,882	128,978	147,218	163,021	168,286	157,926	94,264	126,721

TABLE 40.—*Summary of Statistics of Instructors and Students in All Classes of Endowed Academies, Seminaries, and Other Private Secondary Schools.*

1	Number of Schools.	Number of In- structors.	Students.		Total.
			Male.	Female.	
2	3	4	5	6	
NORTH ATLANTIC DIVISION.					
Maine.....	19	89	1,103	1,117	2,220
New Hampshire	20	97	1,222	643	1,865
Vermont	17	102	{ 1,159 (50)	{ 980	2,139
Massachusetts.....	76	480	3,091	2,843	5,934
Rhode Island.....	8	75	738	219	957
Connecticut	32	157	1,047	835	1,882
New York.....	157	1,105	8,667	8,088	16,755
New Jersey	44	343	{ 2,486 (715)	{ 1,445	4,646
Pennsylvania	77	584	{ 5,764 (152)	{ 3,496	9,412
SOUTH ATLANTIC DIVISION.					
Delaware.....	3	24	244	197	441
Maryland	27	189	1,423	863	2,286
District of Columbia.....	12	107	{ 460 (130)	{ 497	1,137
Virginia.....	30	125	1,113	775	1,888
West Virginia	4	17	95	141	236
North Carolina	63	245	{ 3,194 (127)	{ 2,447	5,708
South Carolina.....	11	53	882	755	1,637
Georgia	82	275	4,388	4,628	9,016
Florida.....	7	50	328	690	1,018

TABLE 40.—Summary of Statistics of Instructors and Students—Continued.

	Number of Schools.	Number of In- structors.	Students.		Total.
1	2	3	Male.	Female.	6
SOUTH CENTRAL DIVISION.					
Kentucky	33	154	{ 1,146 (63) 1,600 }		2,809
Tennessee	35	155	{ 2,284 2,426 }		4,710
Alabama	35	142	{ 1,779 (186) 1,667 }		3,632
Mississippi	13	59	{ 1,075 688 }		1,763
Louisiana	13	107	{ 719 796 }		1,515
Texas	23	175	{ 1,463 (210) 2,033 }		3,706
Arkansas	11	60	{ 793 772 }		1,565
Indian Territory	7	39	{ 389 411 }		800
NORTH CENTRAL DIVISION.					
Ohio	33	213	{ 1,416 (472) 1,685 }		3,101
Indiana	15	154	{ 486 1,267 }		2,225
Illinois	39	307	{ 2,339 (100) 2,653 }		5,092
Michigan	6	33	{ 352 256 }		608
Wisconsin	16	145	{ 1,384 873 }		2,257
Minnesota	13	94	{ 937 (270) 430 }		1,637
Iowa	29	140	{ 1,766 (275) 1,703 }		3,469
Missouri	52	354	{ 2,972 (75) 2,845 }		6,092
Dakota	11	71	{ 441 433 }		999
Nebraska	7	54	{ 236 431 }		667
Kansas	7	59	{ 870 530 }		1,450
WESTERN DIVISION.					
Colorado	6	41	{ 182 260 }		442
New Mexico	9	56	{ 698 289 }		987
Arizona					
Utah	11	56	{ 831 (383) 857 }		2,071
Nevada	1	4	{ 54 }		54
Idaho	1	4	{ 43 }		67
Washington	12	59	{ 528 444 }		972
Oregon	9	45	{ 625 354 }		979
California	23	264	{ 1,633 2,122 }		3,760
North Atlantic Division	450	3,092	{ 25,282 (917) 19,666 }		45,865
South Atlantic Division	239	1,085	{ 12,127 (307) 10,993 }		23,427
South Central Division	170	891	{ 9,643 (459) 10,393 }		20,500
North Central Division	228	1,624	{ 13,199 (1,192) 13,206 }		27,597
Western Division	77	529	{ 4,526 (383) 4,423 }		9,332
Total	1,164	7,221	{ 64,782 (3,258) 58,681 }		126,721

TABLE 41.—SUMMARY OF STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS.

DIVISION A.—*Private Schools for Girls.*

States and Territories.	Number of Schools.	Instructors.			Students.						Volumes in Libraries.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Productive Funds.	Income from Productive Funds.	Benefactions.
		Male.	Female.	Total.		Preparing for College Class- sical Course.	Preparing for Scientific Course or for Scientific School.	Total Preparing for College and for Scientific School.	Total who have Entered Col- lege or Scientific School Since Close of Academic Year.							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
NORTH ATLANTIC DIVISION.																
Maine.....	2	1	9	10	100					400						
New Hampshire.....	1	2	7	3	57					500						
Vermont.....	1		7	3	23					18,050	\$1,100	\$15,000				
Massachusetts.....	20	24	149	173	1,172	65	102	167	42	8		309,000				
Rhode Island.....	1	3	7	10	37					400	200	52,000				
Connecticut.....	7	6	38	44	329	5	0	5		2,900	150	753,000	\$12,000	\$800	\$300	
New York.....	38	71	278	349	3,037	60	10	81	9	25,485	3,817	179,000				
New Jersey.....	9	17	64	81	497	6	8	19		4,274	1,300	280,000		500	3,000	
Pennsylvania.....	17	17	126	143	1,038	6	2	8		10,300	2,250					
SOUTH ATLANTIC DIVISION.																
Delaware.....																
Maryland.....	6	14	58	72	620					6,600	2,950	77,000	4,000	200		
District of Columbia.....	5	17	45	62	463			6		2,600	550	115,000				
Virginia.....	9	7	43	50	483	9	3	12	5	3,450	350	81,800				
West Virginia.....	2	1	11	12	81			12		800	330	18,000				
North Carolina.....	5	10	54	64	765					7,700	1,100	155,200	3,000	190	3,700	
South Carolina.....	2	4	10	14	171							10,000				
Georgia.....	4	9	51	60	1,146	6	0	6	6	1,200	300	72,500				7,000

SOUTH CENTRAL DIVISION.

Kentucky.....	6	4	48	52	569				9,850	400	38,050				
Tennessee.....	5	7	34	41	675		70		1,500	250	45,500				18,000
Alabama.....	5	1	23	30	283					50	81,000				
Mississippi.....	1	1	3	4	50	0	19	4	4		8,000				
Louisiana.....	5	3	38	41	470	7	0	7			39,600				
Texas.....	7	8	68	76	1,029				2,102	400	57,000				0
Arkansas.....	1	1	6	7	143				700		0			0	300
Indian Territory.....	3	3	11	17	291	0	4	4	1,420		30,600				
NORTH CENTRAL DIVISION.															
Ohio.....	9	16	74	90	861	40		40	18,400	2,600	245,000		1,000		
Indiana.....	5	5	90	95	954				4,700	1,000	16,000				
Illinois.....	10	9	120	129	1,353	29	77	106	10,200	2,380	890,200		4,000	2,492	1,550
Michigan.....	1	2	5	7	51	2	2	4	521	1,200	50,000		0	0	0
Wisconsin.....	3	2	35	37	505			124	2,300		75,000				
Minnesota.....	2	1	14	15	182				500		20,000				
Iowa.....	3	3	21	24	255				500	3,000	125,600				
Missouri.....	10	20	108	128	937	3	0	3	8,675	7,560	455,000				
Dakota.....															
Nebraska.....	2	3	27	30	240			4	3,600		200,000				
Kansas.....															
WESTERN DIVISION.															
Montana.....															
Wyoming.....															
Colorado.....	1	3	11	14	150				2,000	400	150,000				300
New Mexico.....															
Arizona.....															
Utah.....	1	2	6	8	113			2	500		10,000				
Nevada.....	1		4	4	54			4			25,000				
Idaho.....															
Washington.....	1	4	11	15	141				800	1,000	5,200		50,000	3,000	
Oregon.....															
California.....	8	18	100	118	1,531	20	40	60	5,950	2,650	120,000				
North Atlantic Division.....	96	141	681	822	6,280	142	122	280	62,300	8,817	1,588,000		12,000	1,300	3,300
South Atlantic Division.....	36	62	272	324	3,729	15	3	43	92,350	5,550	923,500		7,000	350	10,700
South Central Division.....	33	34	234	268	3,510	7	23	100	16,282	1,100	239,100				18,300
North Central Division.....	45	61	494	555	3,373	74	73	281	49,386	17,080	2,036,200		5,000	2,492	1,550
Western Division.....	12	27	132	159	1,992	20	40	66	9,250	4,050	310,200		50,000	3,000	300
United States.....	222	325	1,813	2,138	20,898	258	267	770	150,537	37,197	4,823,000		74,000	7,182	34,150

SOUTH CENTRAL DIVISION.

Kentucky.....	8	10	5	21	330	77	17	94	31	2,880	3,230	145,040	8,500	340	3,000
Tennessee.....	2	7	3	10	212	45	18	33	9	1,875	200	24,103	50,000		5,000
Alabama.....	7	16	1	17	418	104	39	143	48	750	5,480	135,549	45,000		4,100
Mississippi.....	2	3		9	231	19	9	19	3	2,400	100	40,000			
Louisiana.....	3	14	6	20	477	5		5	7	200	5,000	35,000			1,000
Texas.....	2	19		19	400							75,099			
Arkansas.....	2									000	150	138,000			
Indian Territory.....	2	7	2	9	250										
NORTH CENTRAL DIVISION.															
Ohio.....	5	47	6	53	538	5	3	8	47	3,300		192,000			1,000
Indiana.....	1	5	4	9	50							10,000			
Illinois.....	9	52	9	76	906	44		45	5	15,400	1,050	230,030			757
Michigan.....	1	10		10	141	5	25	30	5	5,800	500	125,000			
Wisconsin.....	8	79	1	80	372	41	16	69	100	25,000	5,700	518,000			9,400
Minnesota.....	3	22	1	23	416	10		10	6	2,200	2,500	295,000	15,000	1,200	15,434
Iowa.....	2	10		10	109					3,168	1,800	63,200			2,700
Missouri.....	7	45	8	53	893	165	122	287	39	2,850	3,250	180,000			10,000
Dakota.....															
Nebraska.....															
Kansas.....															
WESTERN DIVISION.															
Montana.....															
Wyoming.....															
Colorado.....	2	14	1	15	94	43		43		1,300		230,000			
New Mexico.....	3	35		35	451	7		7		5,560		23,000			
Arizona.....															
Utah.....															
Nevada.....															
Idaho.....	2	9	2	11	210					6,400		60,000	50,000	3,000	
Washington.....	2	16	2	18	295	45	20	65	15	1,500	500	115,000	10,000	1,500	100
Oregon.....	9	71	13	84	1,187	247	209	455	3	5,724	5,950	255,800	30,000		
California.....															
North Atlantic Division.....	124	711	157	868	11,072	1,318	791	2,611	383	103,339	44,481	8,603,472	12,155,931	986,793	43,956
South Atlantic Division.....	65	225	7	232	4,415	508	119	697	200	51,655	9,050	1,105,800	46,450	27,525	
North Central Division.....	26	85	17	108	2,453	211	83	294	98	8,675	14,160	103,500	7,440	6,000	
South Central Division.....	36	270	29	314	4,020	273	167	410	* 222	58,718	14,500	1,614,200	15,000	1,200	89,351
Western Division.....	18	145	18	163	2,257	349	229	571	18	20,484	6,450	694,800	90,000	4,500	100
United States.....	269	1,436	228	1,085	24,292	2,652	1,389	4,613	921	212,871	88,611	12,610,772	13,167,051	1,016,383	121,932

TABLE 41.—SUMMARY OF STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS.

DIVISION C.—Private Schools for both Sexes.

States and Territories.	Number of Schools.	Instructors.			Students.										Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Productive Funds.	Income from Productive Funds.	Benefactions.
		Male.	Female.	Total.	Preparing for College Classical Course.		Preparing for Scientific College or Scientific School.		Total Preparing for College and Scientific School.	Total who have Entered College Since Close of Academic Year.									
					Male.	Female.	Male.	Female.											
NORTH ATLANTIC DIVISION.																			
Maine.....	15	32	39	71	1,058	1,017	2,075	162	37	51	23	323	63	9,317	\$4,400	\$253,300	\$195,000	\$8,350	\$15,315
New Hampshire.....	17	26	30	56	607	586	1,193	58	32	12	2	105	7	8,900	2,700	252,500	170,700	25,877	31,000
Vermont.....	15	44	49	93	1,120	953	2,128	114	36	82	39	306	37	10,277	6,660	485,100	319,800	13,530	42,705
Massachusetts.....	37	91	108	199	1,690	1,671	3,361	138	50	74	6	317	84	34,144	20,250	1,460,276	738,068	39,148	15,900
Rhode Island.....	3	17	14	31	1,182	1,182	364	18	5	4	0	27	4	9,290	1,200	540,000	390,000	13,400	43,000
Connecticut.....	14	26	40	66	1,524	1,506	1,030	55	42	15	7	130	8	9,635	4,200	253,000	195,000	11,800	.....
New York.....	76	195	277	472	5,102	5,051	10,153	304	103	153	89	933	132	63,036	37,638	1,680,844	455,378	45,767	160,787
New Jersey.....	18	69	86	155	1,121	948	2,784	195	58	80	11	333	50	12,080	11,650	698,950	141,000	7,700	3,650
Pennsylvania.....	41	125	134	259	2,806	2,458	5,416	132	45	61	20	269	87	26,418	16,550	914,200	430,550	26,634	30,345
SOUTH ATLANTIC DIVISION.																			
Delaware.....	3	10	14	24	244	197	441	20	2	4	0	26	12	2,400	1,250	102,000	20,000	.....	.....
Maryland.....	5	18	19	37	407	243	650	.....	.....	.....	.....	.....	.....	4,550	1,500	65,500	200	.....	.....
District of Columbia.....	2	2	15	17	91	34	305	.....	.....	.....	.....	.....	.....	.....	400	35,000	.....	.....	30
Virginia.....	6	12	9	21	281	292	573	0	0	10	2	26	4	1,650	200	28,000	.....	.....	.....
West Virginia.....	1	.....	.....	3	45	60	105	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
North Carolina.....	41	73	73	151	2,166	1,682	3,975	209	99	39	50	535	219	7,737	860	145,700	7,000	90	1,675

South Carolina.....	5	11	16	27	582	584	1,166	21	9	46	42	143	10	800	27,700	15,000	345	650
Georgia.....	65	83	106	189	3,568	3,482	7,450	163	135	135	104	673	132	13,093	216,750	141,150	1,846	1,846
Florida.....	7	14	36	50	325	650	1,018	14	12	19	36	83	12	3,700	170,500	111,150	15,482	15,482
SOUTH CENTRAL DIVISION.																		
Kentucky.....	19	28	50	78	786	1,031	1,880	58	26	63	51	295	22	3,390	145,000	5,000	345	2,276
Tennessee.....	28	50	64	104	2,042	1,751	3,793	98	58	93	80	412	51	7,576	166,300	12,000	480	14,660
Alabama.....	23	38	57	95	1,331	1,384	2,901	66	53	12	6	152	30	6,582	141,700	29,959	1,500	9,945
Mississippi.....	10	21	25	46	824	638	1,462	50	28	24	18	143	18	4,737	39,000	.....	3,000	3,000
Louisiana.....	5	14	32	46	242	325	568	.....	.....	.....	.....	.....	3	1,400	33,800	.....	1,200	.....
Texas.....	14	35	45	80	1,001	1,001	2,277	140	67	55	36	301	27	5,577	274,400	10,000	1,000	697
Arkansas.....	10	24	29	53	793	629	1,422	14	20	1	0	35	9	2,630	81,800	.....	3,382	3,382
Indian Territory.....	2	3	10	13	109	120	229	.....	.....	.....	.....	.....	.....	600	39,000	.....	2,950	2,950
NORTH CENTRAL DIVISION.																		
Ohio.....	19	33	37	70	888	824	1,712	146	52	27	9	242	53	14,715	282,630	112,050	6,110	10,060
Indiana.....	9	18	32	50	436	313	1,221	24	10	3	2	39	9	6,474	134,500	65,000	4,175	.....
Illinois.....	20	47	55	102	1,433	1,300	2,853	74	27	76	60	273	29	367,329	317,650	65,300	1,611	3,200
Michigan.....	4	10	6	16	211	265	416	4	0	10	13	27	8	1,850	75,000	50,000	2,200	3,350
Wisconsin.....	5	11	17	28	412	278	690	37	16	7	2	62	6	3,673	90,000	53,000	3,372	10,400
Minnesota.....	8	40	16	56	521	278	1,069	153	39	37	6	235	35	5,434	164,500	65,000	7,600	3,325
Iowa.....	24	61	45	106	1,657	1,468	3,125	21	13	11	13	115	17	13,861	195,900	77,000	1,600	3,675
Missouri.....	35	89	84	173	2,074	1,908	4,257	149	95	142	119	812	246	20,366	365,150	26,000	1,000	28,098
Nebraska.....	11	34	37	71	441	483	999	55	32	50	69	210	25	6,340	212,500	18,000	1,250	7,475
Montana.....	5	15	9	24	236	191	427	34	13	11	1	59	15	2,560	68,500	7,000	1,000	4,894
Kansas.....	7	38	21	59	870	580	1,450	189	47	59	17	312	20	4,865	362,000	22,500	2,075	7,825
WESTERN DIVISION.																		
Montana.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wyoming.....	3	7	5	12	88	110	198	7	21	5	4	37	10	275	450	38,000	450	1,430
Colorado.....	6	3	18	21	247	289	636	1	3	1	1	6	2	339	48,000	.....	2,150	.....
New Mexico.....	10	14	31	48	831	741	1,363	3	5	2	1	24	4	2,875	99,430	100,500	40	5,207
Utah.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nevada.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Idaho.....	1	2	2	4	24	43	67	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington.....	9	20	13	33	318	300	618	5	5	12	13	50	5	600	20,000	.....	.....	.....
Oregon.....	7	9	18	27	330	354	681	10	7	7	3	27	6	640	54,000	25,000	2,000	8,995
California.....	11	27	35	62	451	591	1,042	8	14	1	12	55	5	4,042	61,000	17,756	1,390	25
North Atlantic Division.....	230	625	777	1,402	14,210	13,377	28,354	1,176	408	537	107	2,763	472	182,977	6,538,170	3,038,496	102,206	342,702
South Atlantic Division.....	188	228	288	519	7,712	7,264	15,283	427	286	253	234	1,538	389	84,387	791,150	183,350	9,138	10,683
South Central Division.....	111	213	302	515	7,190	6,882	14,532	426	252	248	190	1,338	160	32,492	924,000	56,959	4,525	36,910
North Central Division.....	47	396	359	755	9,179	7,828	18,199	886	345	433	311	2,386	464	116,457	2,298,330	561,450	30,903	79,152
Western Division.....	147	82	125	207	2,289	2,431	5,103	34	55	28	34	226	32	10,413	443,450	152,256	5,980	15,657
United States.....	673	1,544	1,851	3,398	40,530	37,783	651,621	2,949	1,346	1,469	966	8,251	1,517	376,726	158,685	3,992,511	242,752	494,104

a Includes 3,228 students, sex not specified.

DETAILED VIEW OF PRIVATE SECONDARY SCHOOLS.

The detailed statistics of endowed academies, seminaries, and other private schools are presented in Table 42, Divisions A, B, and C. As a means of affording a somewhat clearer conception of the variety and scope of secondary institutions special statements of several are here presented, together with brief notices of certain other instrumentalities for the promotion of this grade of educational work.

The *McDonogh Institute*, McDonogh, Md., differs in several important particulars from other endowed secondary schools. Pupils enter at about twelve years of age and leave when between sixteen and seventeen; some to seek professions, the great majority to enter upon industrial or commercial pursuits. The great endeavor of the institute therefore is to train boys "to become faithful and efficient workers in the world."

The entire course occupies six years of forty-two weeks each, but four years is the average time spent by pupils in the work. On account of the peculiar character of the school it is difficult to present the programme in a scheme adapted to schools which make preparation for college a special feature.

The following extract from the catalogue for 1887 gives a very full statement of the plan of studies and the discipline of the school:

"A thoroughly healthy location, and the wide range the farm affords, give us an excellent basis for physical development. This is utilized by a good deal of active outdoor life. Part of this outdoor exercise comes in the way of work—tasks of garden and farm labor—by means of which the boys receive a portion of their hand-craft instruction, but so far as physical development is concerned, the most valuable part of this outdoor exercise consists in the open-air sports to which they are devoted. Not only are foot ball, base ball, and other athletic games kept up with great zest; our wide woodland and numerous streams afford opportunities for wood and water sports which have been fully used. All outdoor sports are encouraged, and our opportunities for these are so exceptionally good that we have never suffered, in good weather, from the lack of a gymnasium, and indeed have preferred the zealous pursuit of these free sports to any other system of physical exercise. Care has been taken to re-enforce these means of physical training by good sanitary arrangements—including well-ventilated rooms and simple diet—and by the establishment of healthy habits of life.

* * * "The curriculum is necessarily shaped by the limited time at our disposal and by the probable careers upon which our graduates will enter. It is from these points of view that the classics have been excluded from our regular course. They are not best suited for the training of youths who are to go into active life at seventeen or eighteen. Special opportunities for classical study are given to those scholars who expect to enter college or university. The leading subject of study in our school course, especially in the earlier years, is the English language, the knowledge and use of which are considered of the first importance. At the end of the second year German is introduced. The language teaching (including both English and German) occupies about one-third of the whole time assigned to study. Next comes mathematics, to which is assigned about one-fourth of the entire study time, and which is taught with careful reference to the training of the growing reasoning faculties.

"Geography in the earlier years is followed by American and English history in the later. The course in science embraces the elements of some science of observation, like botany or zoölogy, followed in the last year by physics or chemistry. Physiology has an important place because of the conviction that any educational scheme which leaves the scholar ignorant of the organs and functions of his own body and the healthful use of them is a travesty. Drawing is a part of the work of every class; book-keeping and short-hand are taught to the upper classes, because of their utility; and instruction in vocal music, according to the requirement of the founder, is given to the whole school. This course of study, which is shown in detail in the schedule, consumes on the average about thirty-one hours per week. That is, this amount of time is spent with the teacher, either in recitation or preparation, to which is to be added, especially in the higher classes, a considerable amount of study done by the boys in their own time. Besides this work in the school-room, there is the manual training instruction and practice, which occupies about nine hours per week of each boy's time, and includes shop-work, printing, type-writing, and garden and farm work.

"The highest aim and best result of any system of school training is the development of character. This is promoted more by the instilling of good principles than by the instilling of knowledge, and it depends more upon the establishment of habits of correct feeling, thinking, and action than upon the instilling of either principles or knowledge. Hence the importance of a systematic and uniform discipline, suited to form those habits of life which will conduce most to efficiency and usefulness in after years.

"Hence the even greater importance of cultivating right views and feelings. This can only be done when the relation between teacher and scholar is one of mutual confidence and respect. The intercourse between our scholars and their superiors is friendly and

unrestrained. The teachers participate in all the leading games and sports of the boys. No reserve keeps the boys at a distance, no espionage renders them uncomfortable. Truth, honesty, and fair dealing are the basis on which it is assumed that all wish to stand, and the boys are encouraged to maintain this basis. Their sense of responsibility is developed by placing many matters under their own control and by consulting them about others. Thus jurisdiction is given them over offences committed by one boy against another. These matters they regulate with firmness and good judgment. Offenders are often regularly tried by them, and rarely have their decisions been found harsh or unjust. Cheating in recitation or other school work is almost unknown, because of the strong public sentiment against it, and of the promptness with which the boys repress it. This matter is in their charge almost altogether. A boy guilty of such practices is looked upon as one willing to take unfair advantage at the expense of his fellows. He loses caste and soon finds it necessary to reform his practices, and a reform of principles is likely to follow. * * * Our boys, in short, constitute a community; they are taught as far as possible to govern themselves with justice and right; the moral and religious lessons given them are impressed by practice; they learn from experience the value of good motives of action, and the inconvenience and sorrow that flow from bad ones."

For 1886-87 the schedule of studies was as follows:

Classes.	English.	Geography.	History.	German.	Mathematics.	Physical Science.	Biology.	Writing.	Short-hand.	Drawing.	Book-keeping.	Musie.	Total.
First.....	4	.....	3	6	6	6	.....	.....	4	2	.....	2	33
Second.....	5	.....	3	6	7	.....	4	.....	4	2	.....	2	33
Third.....	5	3	.....	5	7	.....	3	.....	.....	.....	2	.....	31
Fourth.....	5	.....	.....	.....	10	.....	.....	.....	.....	.....	.....	.....	30
Fifth.....	9	4	.....	.....	9	.....	.....	.....	.....	.....	.....	.....	28
Sixth.....	9	4	.....	.....	9	.....	.....	.....	.....	.....	.....	.....	28

The *Savin Academy and Dowse High School*, Sherborn, Mass., is an endowed school, having substantially the same course as an English and classical high school, with special facilities for preparing boys for technical institutes. It reports distribution of time as follows:

Studies.	Hours per Week.		Weeks each Year.		Years in Course.		Studies.	Hours per Week.		Weeks each Year.		Years in Course.	
	C.	S.	C.	S.	C.	S.		C.	S.	C.	S.	C.	S.
English language and literature.....	(5)		(37)		(3)		German.....	.....	.....	.....	.....	.....	.....
Latin.....	(5)		(37)		(4)		Mathematics.....	(5)		(37)		(5)	
Greek.....	.....		.....		.....		Physics.....	(3)		(37)		(1)	
French.....	(3)		(37)		(2)		Chemistry.....	(5)		(37)		(1)	
							Other sciences a.....	(5)		.....		.....

a Geology and Natural History and Astronomy; two terms each.

Thayer Academy, South Braintree, Mass., is an endowed school intended to supplement the school system of the town. It offers two courses of study to graduates of the high school or to those who have had at least two years at a high school. One of these courses is called the general; in this English, mathematics, and modern languages predominate; the other is preparatory to college. Both courses are the same during the first year, so that distinction between the two does not begin until the second year.

The following is the programme of studies and time as reported for 1887-88:

Studies.	Hours per Week.		Weeks each Year.		Years in Course.		Studies.	Hours per Week.		Weeks each Year.		Years in Course.	
	C.	S.	C.	S.	C.	S.		C.	S.	C.	S.	C.	S.
English language and literature. <i>a</i>	.....	5	38	38	4	4	German.....	3	3	38	38	1	2
Latin.....	5	2½	38	38	4	4	Mathematics.....	5	5	38	38	4	4
Greek.....	5	.....	38	38	4	4	Physics.....	5	5	38	38	1	1
French <i>b</i>	3	.....	38	38	1	3	Chemistry.....	2	2	38	38	1	1
							Other sciences <i>c</i>	2	2	19	19	1	1

a Classical, five hours first year, two hours second, third, and fourth years.

b Scientific, three hours first year, one hour each second and third years.

c Astronomy by lectures to the whole school.

The *Phillips Exeter Academy*, Exeter, N. H., is a school of distinctly secondary grade. Candidates for admission must be at least thirteen years of age, must present certificates of character and a full statement of the amount and kind of work previously accomplished.

The school comprises two courses, classical and English. The students in the former are all preparing for college, which work covers a period of four years. The English course is designed for students who do not purpose entering college. It includes all the requirements for admission to the Massachusetts Institute of Technology, the Sheffield Scientific School, and similar institutions.

The total attendance for the present year is three hundred and twenty pupils, of whom 67½ per cent. are in the classical course. The academy is well endowed, possesses a fine gymnasium, and has excellent provision for science instruction which will be greatly increased by the new laboratory now in process of erection.

Liberal provision is made for meritorious students who have not the means of defraying their expenses at school. During the past year \$1,670 were appropriated for scholarships, free tuition was given to ninety-two scholars, and the sum of \$135, contributed by the alumni association, was lent to meritorious students.

The *Preparatory School for Lehigh University*, Bethlehem, Pa., offers a course arranged with special reference to the admission requirements of that university. Experience shows that the young men who have mastered these have no difficulty in passing the examinations for admission to other universities.

The following schedule of studies and time is reported by the school:

Studies.	Hours per Week.		Weeks each Year.		Years in Course.		Studies.	Hours per Week.		Weeks each Year.		Years in Course.	
	C.	S.	C.	S.	C.	S.		C.	S.	C.	S.	C.	S.
English language and literature.	4	4	35	35	2	2	Mathematics.....	15	15	35	35	2	2
Latin.....	5	.....	35	35	2	2	Physics.....	.....	4	35	35	.....	1
Greek.....	5	.....	35	35	2	.....	United States history and political geography.	3	3	.....	35	½	½
French.....	4	.....	35	35	2	2	Physical geography....	3	.....	35	.....	½	.....
German.....	.....	4	.....	35	.....	2							

The *William Penn Charter School*, Philadelphia, Pa., founded in 1639, has nearly reached its second centennial. It has an ample endowment, a superior teaching force, and full equipment as a college preparatory. The following detailed account of its organization is taken from the catalogue for 1887-88:

"The school is arranged in six classes, and these classes, when their size demands it, are subdivided into sections. The work of each class covers a period of one year. The three upper classes constitute the senior school, the three lower the junior school.

"The staff consists of a head master and thirteen assistants. The head master, in order that he may concentrate himself wholly upon the management of the school, is relieved both of teaching and of clerical work. Each subject of study, or at most two, constitutes a distinct department and is placed in charge of a competent specialist, whose entire time and efforts are devoted to this school; that is, the school enjoys the advantage of a complete and exclusive staff of experienced specialists.

"The requisites for admission to the senior school are, ability to read English with ease and expression, to spell any word of common occurrence, to work all the important rules in arithmetic, to read and parse selections from *Cæsar's De Bello Gallico*, III, to take up with profit such French as *About's Le Roi des Montagnes*, and to pass an examination in general geography and the history of the United States.

"From the examination of those new boys who choose the classical side, French will be omitted; from that of those who choose the modern side, Latin will be omitted. Provided a candidate's ability were above the average, and his knowledge of English and mathematics at least one year in advance, it would be possible for him to enter with no knowledge of either French or Latin, as the desired language could be brought up by extra lessons during the periods which would otherwise be occupied by English and mathematics.

"The course of study of the senior school is arranged to meet the wants of three classes of students,—those intending to complete their studies at school, those preparing for a scientific or technical school, and those aiming for a classical course in college; the first named take the modern side, the second the modern side with modifications, the third the classical side.

"The requisites for admission to the junior school are ability to read and spell selections from a third reader, to work federal money and decimal fractions, to pass an examination in the geography of the United States, and to write a legible hand.

"The school has a completely equipped gymnasium in charge of a member of the staff, who has given special attention to physical education, and every boy is required to exercise daily under his supervision."

The course comprises six years of thirty-six weeks each, the division of time being as follows:

Hours Assigned to—	Classical Course.	Scientific Course.	Hours Assigned to—	Classical Course.	Scientific Course.
English language and literature.	1,358	1,368	Physics.....	432	144
Latin.....	792	288	Chemistry.....		
Greek.....	540		Geography.....		360
French.....	216	720	History.....		
German.....		540	Drawing.....	216	216
Mathematics.....	864	864	Penmanship.....	144	144

The Cambridge School for Girls, Cambridge, Mass.—The increasing efficiency of secondary schools for girls is one of the most important results of the movement for the higher education of women. It is indicated by the large number of college graduates who are sought as principals or teachers by the number of schools established for the professed purpose of preparing girls for college, and by more thorough and definite work in the entire course of training for girls.

One of the most recent examples of secondary schools growing out of this movement is the Cambridge School founded by Mr. Arthur Gilman, who furnishes the following relating to it: "My experience led me to found the Cambridge School for Girls in 1886, and more than sixty young women are now instructed in it in a building adjoining the 'Annex.' The teachers in the Cambridge School are eight—one graduate each from the Annex, Wellesley College, and Smith College, two from the State Normal School at Framingham, and a teacher in each of the departments of German, French, and drawing."

AGENCIES FOR PROMOTING SECONDARY INSTRUCTION.

The value of private instrumentalities in the work of secondary instruction cannot be questioned; but it is evident that the absence of all legal requirements with respect to material resources and the professional qualification of teachers gives opportunity for the existence of inferior schools. As communities advance, however, inferior schools find less and less favor, while those that are suitably equipped voluntarily seek the conditions most favorable to successful work. Thus there is seen to be a natural tendency to improvement in the private as well as in the public schools of progressive communities; nevertheless the opinion is very general that the former should be regulated by law to some extent.

Thus far New York is the only State in which provision has been made for the systematic supervision of private schools considered apart from their relation to colleges. This is done by means of the regents' academic examinations, which were fully described in the Report for 1886-87. As there stated no school can share in the literary fund unless it comes under these examinations, and in order to secure this privilege it must fulfil the required conditions with respect to buildings and equipments.

The examinations, instituted originally with sole reference to the distribution of the literary fund, have proved to be of much greater importance as a means of systematizing and stimulating the work of the schools.

In 1886-87 the number of academies visited was 294, having 1,376 teachers and 39,523 scholars, of whom 14,448 were academic. The total number of subjects covered by the three grades of academic examinations was 41. The number of answer papers submitted was 92,103, and the number for which allowances were made from the literary fund was 84,440.

In several States, associations have been formed, some long standing, others of recent organization, which have for their object the improvement of secondary instruction. The Office has received the report of but one such during the year under review. The following is a brief résumé of the proceedings at its annual meeting.

The organization known as "The Associated Academic Principals of the State of New York" held its third annual conference at Syracuse, December 27 and 28, 1887.

"The committee appointed to represent the Associated Principals at the Conference of College Presidents, in connection with the convocation in June, reported that a series of resolutions was prepared and submitted to the conference. The discussion, however, resulted in nothing definite, and the question of college admission remained much as before."

Following the report of the committee the first subject discussed was "The Teaching of English." The importance of the branch seemed to be fully recognized and progress was reported both in the methods and the results of the instruction. The "Teaching of Greek" and the "Regent's examination in mathematics" were also considered.

Among the resolutions which were unanimously adopted were the following:

"That the increasing attention given by our schools to the study of English is gratifying and should be further encouraged, and the correction of errors of expression should be such as to stimulate the pupil's thought.

"That the use of special topics in the English literature and history regents' examinations is helpful in arousing a spirit of original investigation.

"That it be the expressed opinion of the Associated Academic Principals that the time now prescribed by the regents for the examinations in mathematics is the proper time.

"We wish especially to commend the excellence of the questions sent out from the regent's office, contributing, as they do, so effectually to raise the standard of scholarship in the secondary schools of the State.

"That we request the colleges of the State to accept the regents' diplomas instead of an entrance examination for the subjects covered by them."

The Massachusetts Association of Classical and High School Teachers and the New England Association of Colleges and Preparatory Schools are vigorous societies whose influence is felt throughout the country. Similar societies are working successfully in Western States; among the most efficient of these is the Northern Illinois High School Teachers' Association. As a rule, State teachers' associations have a department devoted to the interests of secondary instruction. The inquiries, discussions, and practical efforts of these organizations are reflected in the advancing standards and the better organization of this department of educational work.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88.

DIVISION A.—Private Schools for Girls.—PART I.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.			Students.		
						Male.	Female.	Total.	Total.	Number in Academic Grade.	Preparing for College in College or Scientific Course and
1	2	3	4	5	6	7	8	9	10	11	12
ALABAMA.											
1 Anniston.....	Noble Institute*	Miss M. C. Bedune.....	1884	1886	P. E.....	2	2	4	40	.....	.....
2 Denopolis.....	Marengo Institute.....	C. F. Mall, M. A.....	1843	1874	Non-sect ..	1	7	8	106	35	.....
3 Mobile.....	Horne and Day School*.....	Mrs. H. F. Wilson.....	1882	1882	Non-sect ..	5	5	5	19	.....	.....
4 Montgomery.....	Hammer Hall*.....	Rev. Geo. M. Everhart, D. D.....	1860	1861	P. E.....	3	5	8	60	.....	.....
5 Tusculum.....	Desha Female Institute*.....	J. D. Dell.....	.....	1872	Non-sect ..	1	4	5	58	.....	.....
ARKANSAS.											
6 Little Rock.....	Arkansas Female College.....	Miss Lou Krause.....	1871	1874	Non-sect ..	1	6	7	143	108	.....
CALIFORNIA.											
7 Oakland.....	Convent of Our Lady of the Sacred Heart.*	Sister Mary Michael of the Saints..	1880	1863	R. C.....	.....	18	18	110	.....	.....
8 Oakland (1825 Telegraph Ave.).....	Field Seminary.....	Mrs. D. B. Condron.....	.....	1872	Non-sect ..	6	12	18	188	165	20
9 Sacramento (Eighth and G Sts.).....	St. Joseph's Academy.....	Sisters of Mercy.....	1857	1857	R. C.....	0	7	7	390	.....	.....
10 San Francisco.....	College of Notre Dame*.....	Sister Aloysie of the Cross, Superior.	1875	1866	R. C.....	.....	22	22	560	.....	.....
11 San Francisco (1036 Valencia St.).....	Irving Institute.....	Rev. Edward B. Church, M. A.....	.....	1877	P. E.....	6	13	19	111	52	2

* Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.
DIVISION A.—*Private Schools for Girls.*—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.			Students.		
						Male.	Female.	Total.	Total.	Number in Academic Grade.	Preparing for College in College or Scientific Course
1	2	3	4	5	6	7	8	9	10	11	12
CALIFORNIA—continued.											
12 San Francisco (1006 Van Ness Ave.).	School for Girls.....	Miss Mary B. West.....	.....	1872	Non-sect..	1	13	14	160	110	6
13 San Francisco (922 Post St.).	Miss Lake's School.....	Miss Mary Lake.....	1863	1862	Non-sect..	4	13	17	130	50	.....
14 Santa Cruz.....	Young Ladies' Seminary.....	Paul Ploda.....	.....	1852	Non-sect..	1	2	3	32	.....	32
COLORADO.											
15 Denver.....	Wolfe Hall.....	Miss F. M. Buchan.....	1869	1868	P. E.	3	11	14	150	85	.....
CONNECTICUT.											
16 Bridgeport.....	Hillside Seminary*.....	Mrs. M. S. Hopson.....	.....	1876	Non-sect..	1	8	9	48	.....	.....
17 Danbury.....	Mrs. Burke's School.....	Mrs. Susan Burke.....	.....	1874	Non-sect..	.....	1	1	25	21	.....
18 Greenwich.....	Greenwich Institute.....	E. Debray Longchamp.....	.....	1884	.....	1	5	6	38	.....	.....
19 New Haven (136 Sherman Ave.).	Eldersage School.....	Misses Bangs.....	.....	1873	Meth.....	.....	5	5	28	.....	.....
20 New Haven (33 Wall St.)...	Home and Day School for Young Ladies.....	Miss Ellen Strong Bartlett.....	.....	1873	Non-sect..	1	16	17	90	39	5
21 New Haven (99 Howe St.).	West End Institute.....	Mrs. Sarah L. Cady.....	.....	1870	Cong.....	.....	.....	10	60	.....	.....
22 Norwalk.....	Institute for Young Ladies and Children.	Miss N. F. Baird.....	.....	1872	Episl.....	3	3	6	40	.....	.....
DISTRICT OF COLUMBIA.											
23 Washington (1312 Massachusetts Ave.).	Holy Cross Academy.....	Sister Angelica.....	1879	1868	R. C. ....	.....	12	12	160	60	.....

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION A.—Private Schools for Girls.—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.			Students.		
						Male.	Female.	Total.	Number in Academic Grade.	Preparing for College or Scientific Course in College or Scientific School.	Total.
1	2	3	4	5	6	7	8	9	10	11	12
IOWA.											
53	Davenport.....	St. Katharine's Hall.....	1859	1885	P. E.....	3	9	12	110	55	.....
54	Dubuque.....	Visitation Academy*.....	1880	1871	R. C.....	.....	10	10	103	.....	.....
55	Dubuque.....	Young Ladies' School*.....	.....	1873	Non-sect.....	.....	2	2	22	.....	.....
KENTUCKY.											
56	Bardstown.....	Nazareth Academy*.....	1829	1814	R. C.....	.....	18	18	120	.....	.....
57	Louisville.....	Hampton College*.....	.....	1878	Non-sect.....	2	12	14	200	.....	.....
58	Maysville.....	Haywood Female Seminary.....	.....	1885	Non-sect.....	1	5	6	66	54	.....
59	Normal.....	East Kentucky Normal School.....	.....	1871	Non-sect.....	.....	6	6	68	63	.....
60	Paris.....	Garth Female Institute*.....	.....	1875	Non-sect.....	.....	4	4	60	.....	.....
61	Paris.....	Miss Kate Edgar.....	1884	1875	Non-sect.....	1	3	4	35	10	.....
LOUISIANA.											
62	Jackson.....	Feliciana Female Collegiate Institute.....	.....	1850	Presb.....	.....	5	5	80	.....	.....
63	New Orleans (222 Coliseum St.).....	Carnatz Institute.....	.....	1865	.....	.....	8	8	50	25	.....
64	New Orleans (429 Carondelet St.).....	School for Young Ladies.....	.....	1874	Non-sect.....	.....	3	3	60	36	4
65	New Orleans (216 Coliseum St.).....	Southern Academic and Kindergarten Institute.....	1884	1881	Non-sect.....	3	14	17	180	40	8
66	Shreveport.....	Miss Kate P. Nelson.....	.....	.....	Non-sect.....	.....	8	8	100	.....	.....

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION A.—Private Schools for Girls.—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.			Students.		
						Male.	Female.	Total.	Number in Academic Grade.	Preparing for College or Scientific Course in College or Scientific School.	Total.
1	2	3	4	5	6	7	8	9	10	11	12
MISSISSIPPI.											
98 Oxford	Warren Female Institute.....	Mrs. C. A. Lancaster.....	1881	1880	Non-sect..	1	3	4	50	24	19
MISSOURI.											
Boonville.....	Cooper Institute*.....	Anthony Haynes, A. M.....	1869	1870	Non-sect..	1	3	4	80	.....	.....
100 Caladonia.....	Bellevue Collegiate Institute.....	W. D. Vandiver.....	1867	1867	M. P. So..	3	3	6	139	.....	.....
101 Independence.....	Kansas City Ladies' College.....	Rev. James M. Chaney, D. D.....	1884	1871	Presb.....	2	6	8	102	76	.....
102 Maple Hill.....	St. Agnes Hall.....	Mrs. Louisa A. Smith.....	1886	1884	P. E.....	1	6	7	3444	.....	.....
103 Rich Hill.....	Rich Hill Female Seminary.....	Mrs. R. A. Allen.....	1882	1884	Non-sect..	.....	3	3	53	8	.....
104 St. Joseph.....	Academy of the Sacred Heart*.....	Louise D. Monahan.....	1852	1852	R. C.....	.....	37	37	170	.....	.....
105 St. Joseph.....	Young Ladies Institute.....	Rev. Charles Martin, M. D.....	1869	1869	Non-sect..	3	7	10	103	.....	.....
106 St. Louis (Meramec St., Station D.).....	Academy of the Sacred Heart.....	Madame M. O'Meara.....	1846	1827	R. C.....	5	25	30	115	61	.....
107 St. Louis (1613 Compton Ave.).....	School of the Good Shepherd.....	Sister Catharine.....	.....	1874	P. E.....	3	15	18	106	50	.....
108 Sedalia.....	Mrs. Miller's Seminary.....	Mrs. R. T. Miller.....	.....	1883	Cumb. P..	2	3	5	25	15	3
NEBRASKA.											
109 Omaha (Park Place).....	Academy of the Sacred Heart.....	Madame Dunne.....	1882	1881	R. C.....	.....	18	18	110	50	.....
110 Omaha.....	Brownell Hall*.....	Rev. Robert Doherty, S. T. D.....	1807	1863	P. E.....	3	9	12	130	.....	4
NEVADA.											
111 Reno.....	Mt. St. Mary's Academy*.....	Mother Mary Dolores.....	.....	1877	R. C.....	.....	4	4	51	.....	4

112	NEW HAMPSHIRE.	Miss Morgan's Home School.....	1874	Non-sect.	2	7	9	57	42	.....
113	NEW JERSEY.	Ivy Hall Seminary.....	1861	Non-sect.	3	6	9	55	.....	5
114		Seven Gables Boarding School.....	.....	Non-sect.	5	6	11	30	15	3
115		English and French School.....	1886	Non-sect.	5	6	11	58	42	5
116		Institute of the Holy Angels.....	1879	R. C.	0	5	5	35	23	0
117		Hightstown Seminary.....	1885	Non-sect.	1	5	6	35	25	2
118		Morristown Seminary.....	1877	Non-sect.	3	16	19	127	.....	.....
119		English and French Day School.....	1881	Non-sect.	2	6	8	55	35	3
120		Plainfield Seminary.....	1868	Non-sect.	2	9	11	63	28	.....
121		Rodman Seminary.....	1876	P. E.	.....	4	4	38	10	1
122	NEW YORK.	Albany Select Academy.....	1870	.....	2	3	5	15	5	.....
123		St. Elizabeth's Academy.....	1860	R. C.	.....	7	7	80	.....	.....
124		Park Place School.....	1884	Non-sect.	1	7	8	61	51	1
125		Berkeley Institute for Young Ladies*.....	1886	Non-sect.	1	6	7	70	.....	0
126		Christianson Institute.....	1872	Non-sect.	.....	7	7	80	.....	.....
127		Holy Angels Academy*.....	1864	R. C.	.....	.....	.....	220	.....	0
128		Drew Seminary and Female College*.....	1866	M. E.	2	4	6	40	.....	.....
129		Clifton Springs Seminary.....	1868	Non-sect.	1	3	4	50	.....	.....
130		Cottage Seminary.....	1861	Non-sect.	1	5	6	74	31	10
131		Houghton Seminary.....	1881	Presb.	6	3	9	85	80	.....
132	NEW YORK.	Boarding and Day School*.....	1877	Presb.	1	10	11	80	.....	.....
133		St. Joseph's Academy*.....	1861	R. C.	3	12	15	150	.....	.....
134		St. Mary's Cathedral School.....	1877	P. E.	4	6	10	64	.....	.....
135		School for Girls.....	1880	P. E.	2	2	2	50	.....	.....
136		School for Young Ladies.....	1884	Non-sect.	1	13	14	80	10	15
137		Brighton Heights Seminary.....	1882	Non-sect.	3	6	9	70	20	10
138		Mt. St. Mary's Academy.....	1888	R. C.	4	15	19	44	.....	.....
139		Brearly School.....	1884	Non-sect.	4	15	19	132	107	12
140		Classical School for Girls*.....	1883	Non-sect.	1	7	8	60	.....	5
141		Comstock School.....	1862	Non-sect.	4	14	18	65	45	.....
142	NEW YORK.	English and French School for Girls.....	1871	Non-sect.	1	7	8	60	.....	5
143		English and French School for Young Ladies.....	1866	Non-sect.	3	11	14	70	.....	.....
144		St. John's School for Young Ladies.....	1873	P. E.	4	15	19	126	46	1
145		School for Girls.....	1872	Non-sect.	9	9	9	84	.....	2
146		Van Norman Institute.....	1857	Non-sect.	4	10	14	84	39	.....
147		Mrs. Well's School for Young Ladies.....	1867	Non-sect.	7	10	17	87	42	2
148		.....	.....	.....	.....	.....	.....	.....	.....	.....
149		.....	.....	.....	.....	.....	.....	.....	.....	.....
150		.....	.....	.....	.....	.....	.....	.....	.....	.....
151		.....	.....	.....	.....	.....	.....	.....	.....	.....

* Statistics of 1896-97.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION A.—Private Schools for Girls.—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.			Students.		
						Male.	Female.	Total.	Total.	Number in Academic Grade.	Preparing for College Course and Classical Course or Scientific School.
1	2	3	4	5	6	7	8	9	10	11	12
NEW YORK—continued.											
149	Nyack.....	Nyack Seminary*.....									
150	Pekskill.....	St. Gabriel's School.....									
151	Poughkeepsie.....	Lyndon Hall Institute*.....									
152	Rochester.....	Livingston Park Seminary.....									
153	Rome.....	St. Peter's Academy.....									
154	Sag Harbor.....	Academy of the Sacred Heart of Mary.....									
155	Tarrytown.....	School for Young Ladies.....									
156	Tarrytown.....	Mt. Hope Ladies' Seminary*.....									
157	Troy.....	Troy Female Seminary.....									
158	Yonkers.....	English, French, and German Day School.....									
159	Yonkers.....	School for Young Ladies and Children.....									
NORTH CAROLINA.											
160	Concord.....	Scotia Seminary.....									
161	Henderson.....	Henderson Female College.....									
162	Littleton.....	Littleton Female College.....									
163	Salcm.....	Salem Female Academy.....									
164	Shelby.....	Shelby Female College*.....									
		Rev. D. J. Satterfield, president.....	1870	1865	Presb.....	1	11	12	231	13	
		J. M. Rhodes.....	1886	1887		2	6	8	100	50	
		S. D. Bagley, president.....	1883	1883	M. E. So.....	2	9	11	100	81	
		Rev. E. Rothlander, D. D.....	1866	1801	Noravian	4	22	26	237	294	
		Edward J. Willis.....	1882	1882		1	6	7	100		

OHIO.											
165	Cincinnati (East 6th St.).....	Academy of the Sisters of Notre Dame*.....	Sister Agnes Aloysia, S. N. D.....	1843	1841	R. C.....	.....	20	20	170	.....
166	Cincinnati (166 West 7th St.).....	Day School for Girls*.....	Madame Store and Lupton.....	.....	1881	Non-sect.....	3	7	10	53	5
167	Cincinnati (15 Morris St.).....	Eden Park School.....	Madame Fredin.....	.....	1881	Non-sect.....	2	9	11	63	0
168	Columbus (135 E. Broad St.).....	English and Classical School.....	Miss Lucetta M. Phelps.....	.....	1884	P. E.....	5	8	13	140	.....
169	Gambier.....	Harcourt Place Seminary*.....	Miss Lucy C. Andrews.....	.....	1887	P. E.....	4	8	12	45	.....
170	Minster.....	St. Mary's Institute.....	Sister M. Salesia.....	.....	1848	R. C.....	.....	4	4	30	.....
171	St. Martin's.....	Ursuline Academy.....	Sister M. Ursula.....	1847	1845	R. C.....	.....	.....	.....	86	51
172	Tiffin.....	College of Ursuline Sisters.....	Sister Ignatius.....	1878	1863	R. C.....	.....	19	10	214	44
173	Zanesville.....	Putnam Seminary*.....	Misses Porter and Howard.....	1836	1834	Non-sect.....	2	8	10	60	.....
PENNSYLVANIA.											
174	Allegheny (140 Grant Ave.).....	School for Girls.....	Miss M. Meiland.....	.....	1872	Non-sect.....	.....	4	4	20	12
175	Beaver.....	Beaver College and Musical Institute.....	Rev. R. T. Taylor, A. M., D. D., president.....	1853	1850	M. E.....	3	4	7	125	110
176	Blairsville.....	Blairsville Ladies' Seminary*.....	Rev. T. H. Ewing, D. D.....	.....	1851	Presb.....	2	6	8	61	.....
177	Erie.....	St. Benedict's Academy.....	Sister M. Clara, O. S. B.....	1863	1854	R. C.....	.....	10	10	60	30
178	Little.....	Linden Hall Seminary.....	Rev. H. A. Brickenschen.....	1863	1794	Moravian.....	2	10	12	59	.....
179	McSherrystown.....	St. Joseph's Academy.....	Mother Ignatius.....	1854	1834	R. C.....	.....	7	7	27	.....
180	Philadelphia (2011 De Lancy Place).....	Agnes Irwin's School.....	Sophy Dallas Irwin.....	.....	1869	.....	2	15	17	125	.....
181	Philadelphia (1700 Green St.).....	English, French, and Music School.....	Miss Harriet Boyer.....	.....	1881	Non-sect.....	0	10	10	70	1
182	Philadelphia (4112 Spruce St.).....	Boarding and Day School for Young Ladies.....	Miss E. F. Gordon.....	.....	1879	.....	2	13	15	102	50
183	Philadelphia (Chestnut Hill).....	Mt. St. Joseph Academy.....	Sisters of St. Joseph.....	1858	1858	R. C.....	.....	12	12	76	46
184	Philadelphia (5012 Elm Ave.).....	School for Girls.....	Mrs. L. M. E. Mitchell.....	.....	1877	.....	1	5	6	25	.....
185	Philadelphia (4117 Walnut St.).....	School for Young Ladies.....	Miss Annie Cooper.....	.....	1868	Non-sect.....	.....	6	6	55	2
186	Philadelphia (4035 Chestnut St.).....	West Chestnut Street Institute.....	Mrs. Julia A. Bogardus.....	.....	.....	Non-sect.....	.....	6	6	40	.....
187	Philadelphia (1707 Chestnut St.).....	West Chestnut Street Seminary.....	Miss M. B. Cochran.....	.....	1878	Meth.....	2	2	4	19	.....
188	Philadelphia (1602 Green St.).....	West Green Street Institute.....	Miss Martha Laird.....	.....	1868	Luth.....	1	8	9	43	8
189	West Chester.....	Darlington Seminary for Young Ladies.....	Richard Darlington, V. L. D.....	.....	1854	Frcuds.....	2	5	7	70	5
190	Williamsport (455 Pine St.).....	Ladies' Classical Institute*.....	Miss Jane M. Wilson.....	.....	1865	Non-sect.....	.....	3	3	50	.....
RHODE ISLAND.											
191	Providence (235 Benefit St.).....	School for Young Ladies.....	Miss Ida M. Gardner.....	.....	1880	Non-sect.....	3	7	10	37	14
192	Reidsville.....	Reidsville Female College*.....	Joseph Venable.....	1857	1857	Presb.....	2	2	4	39	7
193	Sumter.....	Sumter Female Institute.....	Mrs. L. A. Browne.....	.....	1867	Presb.....	2	8	10	132	87

* Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION A.—Private Schools for Girls.—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.		Students.			
						Male.	Female.	Total.	Number in Academic Grade.	Preparing for College or Scientific Course in College or Scientific School.	
1	2	3	4	5	6	7	8	9	10	11	12
TENNESSEE.											
194 Bristol	Sullins College*	Rev. L. L. H. Carlock	1874	1868	M. E. So.	2	6	8	170	.....	.....
195 Covington	Tipton Female Seminary*	George D. Holmes	1853	1855	Non-sect.	1	4	5	125	.....	.....
196 Gallatin	Howard Female Seminary	A. M. Burney, A. M.	1856	1837	Non-sect.	1	9	10	135	.....	.....
197 Memphis (352 Poplar St.)	St. Mary's School	Sisters of St. Mary	.....	1873	P. E.	2	11	13	85	.....	.....
198 Morristown	Female High School*	Rev. J. G. McFerrin	.....	1867	Non-sect.	1	4	5	160	.....	70
TEXAS.											
199 Austin	Hood Seminary	R. L. Hood	.....	1878	Non-sect.	1	5	6	60	30	.....
200 Austin	Stuart Female Seminary*	Miss Irel Red	1884	1876	.....	1	5	6	36	.....	.....
201 Bonham	Masonic Female Institute*	W. D. Allen	.....	1882	Non-sect.	2	3	5	150	.....	.....
202 San Antonio	St. Mary's College	Rev. Father Feith	1881	1882	R. C.	.....	20	20	240	50	.....
203 San Antonio (225 Martin St.)	St. Mary's Hall	Miss Philippa G. Stevenson	.....	1880	P. E.	1	7	8	93	.....	0
204 San Antonio	Ursuline Academy*	Mother M. Magdalen	1881	1852	R. C.	.....	20	20	131	.....	.....
205 Sherman	Sherman Female Institute	J. G. Nash, A. M.	1877	1877	Non-sect.	3	8	11	359	339	.....
UTAH.											
206 Salt Lake City	Rowland Hall*	Miss J. H. Van Rensselaer	.....	1871	P. E.	2	6	8	113	.....	2
VERMONT.											
207 Bellows Falls	St. Agnes Hall	Miss Jane Hapgood	.....	1868	P. E.	.....	3	3	22	10	.....

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88.

DIVISION A.—Private Schools for Girls.—PART II.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	13	14	15	16	17	18	19	20
ALABAMA.									
1	Noble Institute*.....	\$45			\$831,000				\$18,000
2	Marengo Institute.....	25-50	1,500	\$50	10,000				
3	Home and Day School*.....	50-100							
4	Hamner Hall*.....	30-60			25,000				
5	Deshler Female Institute*.....				15,000				
ARKANSAS.									
6	Arkansas Female College.....	30-60	700		0	0	0	0	0
CALIFORNIA.									
7	Convent of Our Lady of the Sacred Heart*.....	a300	1,350						
8	Field Seminary.....	50, 60	800	2,000	40,000				
9	St. Joseph's Academy.....		1,000		10,000			0	0
10	College of Notre Dame*.....	a250							
11	Irving Institute.....	100	800	250	40,000	0	0	0	0
12	School for Girls.....	80-160				0	0	0	0
13	Miss Lake's School.....	100	1,000	100	30,000				
14	Young Ladies' Seminary.....	50	1,000	300				0	0
COLORADO.									
15	Wolfe Hall.....	20-30	2,000	400	150,000				300
CONNECTICUT.									
16	Hillside Seminary*.....	30-80	700		22,000				
17	Mrs. Burke's School.....	40							
18	Greenwich Institute.....	40-100	1,000		10,000				
19	The Elderage School.....	40, 60	400		20,000				
20	Home and Day School for Young Ladies.....	40-106	400	150	(b)			0	0
21	West End Institute.....	60	400						
22	Institute for Young Ladies and Children.....	30-50							
DISTRICT OF COLUMBIA.									
23	Holy Cross Academy.....		600	400	80,000				
24	McDonald-Ellis School*.....	60-100	200		35,000				
25	Norwood Female Institute.....	100	1,000	150	(b)				0
26	Waverly Seminary.....	50-80	800		(b)				0
27	West End Seminary.....								
GEORGIA.									
28	Home School for Young Ladies.....		500						
29	Spelman Seminary*.....	8	500		65,000				7,000
30	Washington Seminary.....	46			(b)				
31	Chappell Seminary.....	56		200	7,500				
32	Select School for Girls.....	30						\$100	
33	Female Seminary.....	20-40							
34	St. Joseph's Academy.....	40	200	100					
ILLINOIS.									
35	Girls' Higher School.....	50-132	1,500	250	(b)	0	0		0
36	Grant Collegiate Institute.....	60-125	600	300					

* Statistics of 1886-87.

a Includes board.

b Rented property.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION A.—Private Schools for Girls.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	13	14	15	16	17	18	19	20
	ILLINOIS—continued.								
37	St. Francis Xavier's Academy *	a\$150	2,000	.....	\$250,000	.....	.....	.....	.....
38	Monticello Female Seminary.*	40	3,500	.....	200,000	.....	.....	.....	.....
39	St. Francis Academy.....	10-20	700	\$1,580	201,000	.....	\$2,092	.....	.....
40	St. Joseph's Seminary.....	10-30	600	.....	24,200	.....	.....	.....	.....
41	St. Mary's School.....	a\$60	1,000	.....	100,000	0	0	0	\$1,500
42	St. Francis Xavier's Academy.	25	100	100	40,000	\$4,000	400	0	.....
43	St. Agatha's School.....	30-60	200	150	15,000	0	0	0	50
44	Institute of Our Lady of the Sacred Heart.*	160	.....	.....	50,000	.....	.....	.....	.....
	INDIANA.								
45	Classical School for Girls.....	60-120	.....	.....	16,000	.....	.....	.....	.....
46	Indianapolis Institute.....	60	.....	.....	.....	.....	.....	.....	.....
47	St. John's Academy.....	a150	700	.....	.....	.....	.....	0	0
48	St. Mary's Academy.....	.....	4,000	1,000	.....	.....	.....	0	.....
49	St. Mary's Institute.....	a180	.....	.....	.....	.....	.....	.....	.....
	INDIAN TERRITORY.								
50	Harrell International Institute.	15-25	380	.....	1,600	.....	.....	\$1,000	.....
51	New Hope Female Seminary.	0	150	.....	15,000	.....	.....	10,000	.....
52	Wheelock Female Seminary.	a50	900	.....	14,000	.....	.....	5,500	300
	IOWA.								
53	St. Katharine's Hall.....	60	.....	3,000	75,000	.....	.....	.....	.....
54	Visitation Academy*.....	15-25	500	.....	50,000	.....	.....	.....	.....
55	Young Ladies' School*.....	40-60	.....	.....	.....	.....	.....	.....	.....
	KENTUCKY.								
56	Nazareth Academy*.....	a154-176	3,800	.....	.....	.....	.....	.....	.....
57	Hampton College*.....	150	5,000	.....	.....	.....	.....	0	.....
58	Hayswood Female Seminary	35-50	.....	150	8,000	.....	.....	0	0
59	East Kentucky Normal School.	50	600	150	25,000	.....	.....	0	0
60	Garth Female Institute*.....	40-50	.....	.....	.....	.....	.....	.....	.....
61	Miss Tipton's Select School..	40	450	100	5,000	.....	.....	0	0
	LOUISIANA.								
62	Feliciana Female Collegiate Institute.	20-40	.....	0	3,000	.....	.....	0	0
63	Carnatz Institute.....	81	.....	.....	8,000	.....	.....	.....	.....
64	School for Young Ladies.....	50-100	.....	.....	8,000	.....	.....	.....	.....
65	Southern Academic and Kindergarten Institute.	45-100	150	.....	20,000	.....	.....	0	0
66	Shreveport Seminary.....	40,50	.....	.....	.....	.....	.....	.....	.....
	MAINE.								
67	The Caswell School.....	60	.....	.....	.....	.....	.....	0	.....
68	Douglass Seminary.....	a150	.....	.....	.....	.....	.....	.....	.....

* Statistics of 1886-87.

a Includes board.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION A.—*Private Schools for Girls.*—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	13	14	15	16	17	18	19	20
	MARYLAND.								
69	St. Francis Seminary*.....					0	0	0	0
70	St. Edward's Academy.....	\$5-50	300						
71	Notre Dame of Maryland.....	50	4,000	\$2,000					
72	Hagerstown Seminary for Young Ladies.....	40	1,500	450	\$50,000				
73	The Hannah More Academy..	30	300		15,000	\$4,000	\$200	0	0
74	Rockland School for Girls....	46	500	500	12,000				
	MASSACHUSETTS.								
75	Home School for Girls.....	a500	1,000		12,000				
76	Riverside Home and Day School.*	75	500		25,000				
77	Academy of the Sacred Heart*	60-100	700						
78	Boston Academy of Notre Dame.*	40	2,000						
79	Home and Day School for Girls.....	100-250							
80	Home and Day School for Young Ladies.....	200						0	
81	Miss Ireland's School.....	250	1,500	300				0	0
82	Sears' School for Young Ladies.....	100-250	700	200					
83	Hill View School.....	a216							
84	Shawmut School.....	80-200							
85	Home School for Young Ladies.....	75			7,000				
86	Prospect Hill School.....	a375	200		40,000				
87	Home and Day School.....	60-150	250	100					
88	Home School.....	25-75							
89	Classical School for Girls.....	100	3,000	500					
90	Northfield Seminary.....	21	3,500		225,000				
91	Notre Dame Academy.....	a200	1,400					0	
92	Dana Hall School.....	75							0
93	Howard Collegiate Institute.	120	3,000						
94	Miss Williams' School.....	100-175	300		(b)				
	MICHIGAN.								
95	Somerville School.....	40	521	1,200	50,000	0	0	0	0
	MINNESOTA.								
96	Bethlehem Academy *.....	12-25	500		20,000				
97	Judson Female Institute.....	43-100							
	MISSISSIPPI.								
98	Warren Female Institute.....	30-50			8,000				
	MISSOURI.								
99	Cooper Institute *.....	30-60	500		10,000				
100	Bellevue Collegiate Institute	40	450						
101	Kansas City Ladies' College..	40, 50		1,000	40,000				
102	St. Agnes Hall.....	20-100	75	6,000					
103	Rich Hill Female Seminary..	40							
104	Academy of the Sacred Heart.*								
105	Young Ladies' Institute.....	40	150	100	25,000	0		0	0

* Statistics of 1886-87.

a Includes board.

b Rented property.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION A.—Private Schools for Girls.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	13	14	15	16	17	18	19	20
	MISSOURI—continued.								
106	Academy of the Sacred Heart.	a\$250	5,000	.....	\$400,000	.....	.....	.....	.....
107	School of the Good Shepherd..	30-130	1,000	\$400	.....	0	.....	0	.....
108	Mrs. Miller's Seminary	36-50	1,500	.....	10,000	.....	.....	0	.....
	NEBRASKA.								
109	Academy of the Sacred Heart.	100	1,100	.....	.....	.....	.....	0	0
110	Brownell Hall*	60	2,500	.....	200,000	.....	.....	.....	.....
	NEVADA.								
111	Mt. St. Mary's Academy*	250	.....	.....	25,000	.....	.....	.....	.....
	NEW HAMPSHIRE.								
112	Miss Morgan's Home School..	100	400	.....	15,000	.....	.....	.....	.....
	NEW JERSEY.								
113	Ivy Hall Seminary	50	1,100	.....	13,000	.....	.....	.....	.....
114	Seven Gables Boarding School.	600	.....	.....	20,000	.....	.....	.....	.....
115	English and French School..	48-100	.....	.....	.....	0	0	0	0
116	Institute of the Holy Angels..	225	600	.....	25,000	.....	.....	.....	.....
117	Hightstown Seminary.....	40	250	100	11,000	.....	.....	.....	.....
118	Morristown Seminary.....	50-130	274	200	45,000	.....	.....	.....	.....
119	English and French Day School.	60-125	500	.....	15,000	.....	.....	0	.....
120	Plainfield Seminary.....	50-100	1,500	1,000	50,000	.....	.....	0	.....
121	Rodman Seminary.....	.....	50	.....	.....	.....	.....	.....	.....
	NEW YORK.								
122	Albany Select Academy.....	60-200	500	500	6,000	.....	.....	0	.....
123	St. Elizabeth's Academy*.....	25	700	.....	.....	.....	.....	.....	.....
124	Park Place School.....	30	.....	.....	.....	.....	.....	.....	.....
125	Berkeley Institute for Young Ladies.*	60-136	.....	.....	30,000	.....	.....	.....	.....
126	Christiansen Institute.....	40-100	.....	.....	.....	.....	.....	.....	.....
127	Holy Angels Academy*.....	26	1,127	.....	100,000	.....	.....	.....	.....
128	Drew Seminary and Female College.*	30-100	3,000	.....	50,000	.....	.....	.....	.....
129	Clifton Springs Seminary.....	28-50	500	.....	10,000	.....	.....	.....	\$300
130	Cottage Seminary.....	20-30	500	50	5,000	0	0	0	0
131	Houghton Seminary.....	30	1,150	725	47,500	.....	.....	\$320	.....
132	Boarding and Day School*.....	60-110	.....	.....	100,000	.....	.....	.....	.....
133	St. Joseph's Academy*.....	.....	2,000	.....	.....	.....	.....	.....	.....
134	St. Mary's Cathedral School..	50-100	300	.....	.....	.....	.....	.....	.....
135	School for Girls.....	40	.....	.....	5,000	.....	.....	.....	.....
136	School for Young Ladies.....	48	100	.....	7,000	.....	.....	0	0
137	School for Young Ladies.....	60-100	500	.....	14,000	.....	.....	.....	.....
138	Brighton Heights Seminary..	100	3,000	.....	25,000	.....	.....	.....	.....
139	Mt. St. Mary's Academy.....	20	400	520	25,000	.....	\$500	.....	.....
140	Brearly School.....	250-350	.....	.....	60,000	\$12,000	.....	.....	.....
141	Classical School for Girls*.....	125	1,000	.....	.....	.....	.....	.....	.....
142	Comstock School.....	100-250	650	.....	.....	.....	.....	.....	.....
143	English and French School for Girls.	120-250	.....	.....	.....	.....	.....	.....	.....

* Statistics of 1886-87.

a Includes board.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION A.—Private Schools for Girls.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	13	14	15	16	17	18	19	20
	NEW YORK—continued.								
144	English and French School for Young Ladies.	\$100-200	.....	.....	.....	.....	.....	.....	.....
145	St. John's School for Young Ladies.	100-300	1,000	\$400	(b)	0	0	.....	.....
146	School for Girls.....	100-500	.....	.....	.....	.....	.....	.....	.....
147	Van Norman Institute	60-250	1,200	.....	.....	.....	.....	0	0
148	Mrs. Weill's School for Young Ladies.	100-225	2,000	.....	.....	.....	.....	0	0
149	Nyack Seminary*.....	.....	.....	.....	.....	.....	.....	.....	.....
150	St. Gabriel's School.....	60	1,025	300	\$50,000	.....	.....	0	.....
151	Lyndon Hall Institute *	32-60	.....	.....	30,000	.....	.....	.....	.....
152	Livingston Park Seminary	50	450	.....	40,000	.....	.....	.....	.....
153	St. Peter's Academy*.....	16-24	.....	.....	20,000	.....	.....	.....	.....
154	Academy of the Sacred Heart of Mary.	a200	.....	.....	8,500	.....	.....	.....	.....
155	School for Young Ladies.....	60-100	500	150	.....	.....	.....	.....	.....
156	Mount Hope Ladies' Seminary*.....	40-80	.....	.....	.....	.....	.....	.....	.....
157	Troy Female Seminary.....	72	1,683	1,172	100,000	.....	.....	\$150	.....
158	English, French, and German Day School.	125	2,000	.....	.....	.....	.....	.....	.....
159	School for Young Ladies and Children.	90	200	.....	20,000	.....	.....	.....	.....
	NORTH CAROLINA.								
160	Scotia Seminary.....	0	2,000	.....	25,000	\$2,000	\$110	0	\$3,700
161	Henderson Female College.....	30	200	.....	10,000	.....	.....	.....	.....
162	Littleton Female College.....	130	500	100	7,500	.....	.....	0	0
163	Salem Female Academy.....	40	5,000	1,000	100,000	1,000	80	.....	.....
164	Shelby Female College*.....	50	.....	.....	12,700	.....	.....	.....	.....
	OHIO.								
165	Academy of the Sisters of Notre Dame.*.....	.....	.....	.....	.....	.....	.....	.....	.....
166	Day School for Girls*.....	95-155	3,000	.....	60,000	.....	.....	.....	.....
167	Eden Park School.....	180	600	300	50,000	.....	.....	.....	0
168	English and Classical School	50-100	.....	.....	.....	.....	.....	.....	.....
169	Harcourt Place Seminary*.....	a400	.....	.....	50,000	.....	.....	.....	.....
170	St. Mary's Institute.....	100	200	.....	20,000	1,000	.....	.....	.....
171	Ursuline Academy.....	a200	5,000	2,000	.....	.....	.....	.....	.....
172	College of Ursuline Sisters.....	20	600	300	30,000	.....	.....	.....	.....
173	Putnam Seminary*.....	225	9,000	.....	35,000	.....	.....	.....	.....
	PENNSYLVANIA.								
174	School for Girls.....	.....	.....	.....	.....	.....	.....	.....	.....
175	Beaver College and Musical Institute.	40	1,200	1,000	50,000	0	0	0	3,000
176	Blairsville Ladies' Seminary*	40	700	.....	30,000	.....	.....	.....	.....
177	St. Benedict's Academy.....	15-36	450	.....	.....	.....	.....	.....	.....
178	Linden Hall Seminary.....	a250	2,650	300	60,000	0	0	0	.....
179	St. Joseph's Academy.....	150	.....	.....	.....	.....	.....	.....	.....
180	Agnes Irwin's School.....	100-170	800	.....	.....	.....	.....	0	0
181	English, French, and Music School.	50-150	.....	.....	.....	.....	.....	0	0
182	Boarding and Day School for Young Ladies.	50-110	400	350	.....	.....	.....	.....	.....
183	Mt. St. Joseph Academy.....	200	3,500	.....	100,000	.....	.....	.....	.....

* Statistics of 1886-87.

a Includes board.

b Rented property

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION A.—Private Schools for Girls.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received during the Year.
	2	13	14	15	16	17	18	19	20
	PENNSYLVANIA—continued.								
184	School for Girls.....	\$50-100	.....	.....	.....	.....	.....	.....	.....
185	School for Young Ladies.....	.....	.....	.....	.....	.....	.....	.....	.....
186	West Chestnut Street Institute.	40-120	.....	.....	\$15,000	.....	.....	.....	.....
187	West Chestnut Street Seminary.	50-120	.....	.....	.....	.....	.....	.....	.....
188	West Green Street Institute...	50-100	.....	.....	.....	.....	.....	.....	.....
189	Darlington Seminary for Young Ladies.	50	600	\$600	25,000	.....	\$500	0	.....
190	Ladies Classical Institute*....	32-62	.....	.....	.....	.....	.....	.....	.....
	RHODE ISLAND.								
191	School for Young Ladies.....	75-130	400	200	(b)	.....	.....	.....	.....
	SOUTH CAROLINA.								
192	Reidville Female College*....	20-40	.....	.....	.....	.....	.....	.....	.....
193	Sumter Female Institute.....	10-50	.....	.....	10,000	.....	.....	0	0
	TENNESSEE.								
194	Sullins College*.....	20-40	.....	.....	20,000	.....	.....	.....	.....
195	Tipton Female Seminary*....	21-36	100	.....	3,500	.....	.....	.....	.....
196	Howard Female Seminary.....	20-50	400	250	20,000	.....	.....	0	.....
197	St. Mary's School.....	40-60	.....	.....	.....	.....	.....	.....	.....
198	Female High School*.....	15-30	.....	.....	2,000	.....	.....	.....	.....
	TEXAS.								
199	Hood Seminary.....	50	200	0	16,000	0	0	0	0
200	Stuart Female Seminary*....	50	300	.....	20,000	.....	.....	.....	.....
201	Masonic Female Institute*....	30-40	300	.....	1,000	.....	.....	.....	.....
202	St. Mary's College.....	a200	400	.....	.....	.....	.....	.....	.....
203	St. Mary's Hall.....	.....	202	.....	.....	.....	.....	0	0
204	Ursuline Academy*.....	.....	500	.....	.....	.....	.....	.....	.....
205	Sherman Female Institute...	a150	200	400	20,000	.....	.....	0	0
	UTAH.								
206	Rowland Hall*.....	32-48	500	.....	10,000	.....	.....	.....	.....
	VERMONT.								
207	St. Agnes Hall.....	a300	500	.....	.....	.....	.....	.....	.....
	VIRGINIA.								
208	Piedmont Female Institute...	50	1,000	.....	.....	.....	.....	.....	.....
209	Mt. Pisgah Academy.....	100	200	.....	6,000	.....	.....	.....	0
210	Central Female Institute.....	60-90	150	.....	10,000	.....	.....	0	.....
211	Edge Hill School.....	a200	2,000	.....	10,000	.....	.....	.....	.....
212	Hartshorn Memorial College.	8	350	.....	35,000	0	0	0	0
213	Valley Seminary.....	200	100	0	6,000	0	0	0	0
214	Female Seminary.....	50	.....	.....	4,800	.....	.....	.....	.....
215	Trinity Hall Female College..	75	.....	.....	10,000	.....	.....	.....	.....
216	Wytheville Seminary.....	20-40	.....	.....	.....	.....	.....	.....	.....

* Statistics of 1886-87.

a Includes board.

b Rented property.

TABLE 42. —STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION A.—*Private Schools for Girls.*—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	13	14	15	16	17	18	19	20
	WASHINGTON TERRITORY.								
217	Annie Wright Seminary.....	\$40	800	\$1,000	\$5,200	\$50,000	\$3,000	.....	.....
	WEST VIRGINIA.								
218	Morgantown Female Seminary.	16-32	600	.....	8,000	.....	.....	.....	.....
219	Wheeling Female Academy..	50	200	300	10,000	0	0	.....	.....
	WISCONSIN.								
220	St. Mary's Day and High School.	.....	.....	.....	.....	.....	.....	0	0
221	St. Mary's Institute.....	a150	.....	.....	.....	.....	.....	.....	.....
222	St. Catherine's Female Academy.	a140	2,300	.....	75,000	.....	.....	0	.....

* Statistics of 1886-86.

a Includes board.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88.

DIVISION B.—*Private Schools for Boys*.—PART I.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.		Students.	
						Male.	Female.	Total.	Number in Academic
1	2	3	4	5	6	7	8	9	10
ALABAMA.									
1	Anniston	High School for Boys	1887	1887	P. E.	3	.....	3	45
2	Athens	Athens Male Academy	1879	1879	Non-sect.	1	1	2	60
3	Livingston	Livingston Male Academy	.....	.....	Non-sect.	2	.....	2	78
4	Marion	Marion Military Institute	.....	.....	.....	4	.....	4	79
5	Mobile	Towle's Institute for Boys	.....	1887	0	2	.....	2	44
6	Selma	St. Andrew's Academy	.....	1869	.....	2	.....	2	44
7	Tuscaloosa	University High School	.....	.....	R. C.	1	1	2	42
		W. H. Verner	1887	1875	0	3	.....	3	100
CALIFORNIA.									
8	Belmont	Belmont School	.....	1885	Non-sect.	5	3	8	60
9	Los Angeles	Melpherron Academy	.....	1886	Presb.	4	3	7	118
10	Oakland	California Military Academy	.....	1865	Non-sect.	8	1	9	70
11	Oakland	Hopkins Academy	.....	1871	Cong.	5	1	6	80
12	Oakland	Sackett's School	.....	1871	Non-sect.	11	1	12	41
13	San Francisco	Sacred Heart College	.....	1879	R. C.	15	.....	15	500
14	San Francisco	Urban Hall College	.....	1874	0	7	3	10	98
15	San Mateo	Laurel Hall College	.....	1884	Non-sect.	7	.....	7	106
16	San Mateo	St. Matthew's Hall	.....	1870	P. E.	9	1	10	114
		Rev. Alfred Leo Brewer	.....	1866	.....	.....	.....	.....	.....
COLORADO.									
17	Denver	College of the Sacred Heart	.....	1884	R. C.	12	.....	12	54
18	Denver	Jarvis Hall	.....	1880	P. E.	2	1	3	40
		Rev. Seaver M. Holden, M.A.	.....	1869	.....	.....	.....	.....	.....

* Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION B.—*Private Schools for Boys.*—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.		Students.			
						Male.	Female.	Total.	Total.	Number in Academic Grade.	Preparing for College Classical Course and Scientific Course in College or Scientific School.
1	2	3	4	5	6	7	8	9	10	11	12
CONNECTICUT.											
19 Black Hall.....	Black Hall School.....	Chas. G. Bartlett.....	.....	1876	Non-sect.....	2	3	5	19	.....	12
20 Bridgeport.....	Park Avenue Institute.....	S. B. Jones, A. M.....	.....	1870	Non-sect.....	1	2	3	50	30	16
21 Brookfield.....	Curtis School for Boys.....	Fred. S. Curtis, Ph. B.....	.....	1875	Non-sect.....	1	1	2	23	.....	30
22 Cheshire.....	Episcopal Academy of Connecticut.....	S. J. Horton.....	1794	1796	P. E.....	8	8	16	40	45	38
23 Middletown.....	Wilson Grammar School.....	E. H. Wilson, A. M.....	.....	1884	Cong.....	2	1	3	40	28	38
24 New Haven *.....	Hopkins Grammar School.....	Rev. Geo. L. Fox, M. A.....	.....	1884	.....	2	1	3	40	.....	59
25 New London.....	Bulkeley School.....	E. R. Hall.....	1850	1873	Non-sect.....	2	1	3	16	10	6
26 Stamford.....	Betts' Military Academy.....	William J. Betts.....	.....	1839	Non-sect.....	2	1	3	86	.....	17
27 Stamford *.....	School for Boys.....	Hiram U. King.....	.....	1875	Non-sect.....	7	1	8	61	.....	.....
28 Washington.....	"The Gunnery".....	J. C. Brinsmade.....	.....	.....	Non-sect.....	2	5	7	40	25	.....
29 Wilton.....	Wilton Boarding School.....	Augustus Whitlock.....	.....	1848	Non-sect.....	2	1	3	.....	.....	.....
DISTRICT OF COLUMBIA.											
30 Georgetown.....	Linthicum Institute *.....	.....	1872	1875	Non-sect.....	6	.....	6	110	.....	.....
31 Washington (621 Seventh St., N. W.).....	Arlington Academy.....	Burton Macatee, A. M., M. D.....	.....	1890	Non-sect.....	3	.....	3	20	.....	.....
32 Washington (1335 H St., N. W.).....	Columbian College Preparatory School. *.....	Andrew P. Montague, A. M.....	1821	1821	Non-sect.....	9	.....	9	91	.....	.....
33 Washington (306 Indiana Ave.).....	Rittenhouse Academy.....	O. C. Wight.....	.....	1840	Non-sect.....	1	.....	1	16	.....	6
34 Washington (Vermont Ave.).....	St. John's College *.....	Rev. Brother Dennis.....	1887	1881	R. C.....	9	.....	9	132	.....	.....

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION B.—Private Schools for Boys.—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.			Students.		
						Male.	Female.	Total.	Total.	Number in Academic Grade.	Preparing for College in College or Scientific School.
1	2	3	4	5		7	8	9	10	11	12
KENTUCKY—continued.											
64 Louisville.....	Louisville Military Academy.....	Robert D. Allen.....	1887	1887	0	2	.....	2	20	6	17
65 Louisville.....	Louisville Rugby School.....	A. L. McDonald.....	1876	1872	Non-sect.....	5	1	6	53	44	5
66 Shelbyville.....	Shelbyville Male Academy.....	Geo. L. Sampson, A. M.....	.....	1880	Non-sect.....	2	.....	2	42	.....	22
LOUISIANA.											
67 New Orleans.....	Leche's Graded Institute.....	A. S. Leche.....	1885	1882	Non-sect.....	5	6	11	342	52	5
68 New Orleans (3d district).....	St. Isidore's College *.....	Rev. J. M. Scherer, C. S. C.....	.....	1879	R. C.....	6	.....	6	85	.....	.....
69 Thibodaux.....	Thibodaux College.....	Chas. M. Menard.....	1839	1839	R. C.....	3	.....	3	50	25	.....
MAINE.											
70 Farmington.....	Abbott Family School *.....	A. H. Abbott.....	1870	1844	Non-sect.....	3	1	4	20	.....	.....
71 Topsham.....	Franklin Family School.....	D. L. Smith.....	.....	1857	Non-sect.....	2	2	4	30	23	6
MARYLAND.											
72 Baltimore (608 N. Eutaw St.).....	English-German Classical School.....	E. Deichmann.....	.....	1884	Non-sect.....	7	1	8	110	65	8
73 Baltimore (McMechen St.).....	Oxford School for Boys*.....	William C. Hynds, A. M.....	.....	1873	Non-sect.....	2	.....	2	18	.....	.....
74 Baltimore (16 Saratoga St.).....	St. Joseph's Academy* (Calvert Hall).....	Brother Paphylinus, F. S. C.....	.....	1845	R. C.....	11	.....	11	175	.....	.....
75 Baltimore (870 Linden Ave.).....	School for Boys.....	Geo. G. Carey, A. M.....	.....	1864	Non-sect.....	6	.....	6	62	.....	10
76 Baltimore (703 Madison Ave.).....	Wright's University School.....	Abram W. Wright.....	.....	1885	Non-sect.....	4	.....	4	35	0	23

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION B.—Private Schools for Boys.—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.			Students.		
						Male.	Female.	Total.	Total.	Number in Academic Grade.	Preparing for College in College or Scientific School.
1	2	3	4	5	6	7	8	9	10	11	12
MISSOURI.											
113 Boonville.....	Kemper Family School.....	T. A. Johnston.....	1844	1844	Luth.....	5	.....	5	64	34	3
114 Concordia.....	St. Paul's College.....	Andrew Baepier.....	1883	1883	Luth.....	2	.....	2	35	35	35
115 Lexington.....	Wentworth Male Academy.....	Sanford Sellers, M. A.....	1889	1889	Non-sect.....	5	.....	5	90	90	24
116 Macon.....	St. James Military Academy.....	F. E. Moulton, M. A.....	1877	1875	P. E.....	4	1	5	36	.....	.....
117 St. Louis (910-912 S. 9th St.).....	Educational Institute.....	J. Toensfeldt.....	1879	1879	0	15	.....	15	281	69	14
118 St. Louis.....	Lutheran High School.....	A. C. Burgdorf.....	1867	1867	Ev. Luth.....	2	.....	2	64	.....	.....
119 St. Louis.....	Smith Academy.....	Denham Arnold, A. M.....	1853	1854	Non-sect.....	12	7	19	328	217	211
NEW HAMPSHIRE.											
120 Concord.....	St. Paul's School *.....	Rev. Henry A. Coit, D. D.....	1855	1856	P. E.....	23	.....	23	295	.....	210
121 Exeter.....	Phillips Exeter Academy.....	Walter Quincy Scott, D. D.....	1781	1783	Non-sect.....	9	.....	9	320	.....	216
NEW JERSEY.											
122 Bloomfield.....	Academic Department of German Theological School of Newark, N. J.....	Charles E. Knox.....	1871	1869	Presb.....	4	.....	4	17	.....	17
123 Bordentown.....	Adelphic Institute.....	Robert Julien, A. M.....	.....	1866	.....	1	.....	1	16	.....	1
124 Bordentown.....	Bordentown Military Institute.....	T. H. Landon, A. M.....	.....	.....	.....	7	.....	7	50	40	.....
125 Bridgeton.....	West Jersey Academy.....	Caleb Allen, A. B.....	1850	1854	Presb.....	10	.....	10	85	79	6
126 Deckertown.....	Seeley's Home School for Boys.....	W. H. Seeley.....	1884	1884	Non-sect.....	1	.....	1	31	.....	4
127 Englewood.....	English and Classical School.....	W. W. Smith, A. M.....	.....	1880	Non-sect.....	3	2	5	180	40	30
128 Freehold.....	Freehold Institute *.....	Rev. A. G. Chambers, A. M.....	1884	1844	Presb.....	7	1	8	85	.....	.....
129 Hoboken.....	Stevens High School.....	Edward Wall.....	.....	1870	Non-sect.....	10	.....	10	182	158	171

130	Lakewood.....	Courland Place School.....	Thos. D. Suplice.....	1885	P. E.....	6	.....	23	.....	21
131	Lawrenceville.....	Lawrenceville School.....	Rev. James C. Mackenzie, Ph. D.....	1883	Presb.....	9	.....	150	.....	150
132	Morristown.....	Morris Academy.....	Charles D. Platt.....	1791	Non-sect.....	3	3	65	.....	6
133	Mt. Holly.....	Mt. Holly Academy.....	Henry M. Waldrat.....	1791	Non-sect.....	3	2	69	23	16
134	Newark (536-548 High Street).....	Newark Academy.....	S. A. Farrand.....	1725	Non-sect.....	9	11	221	131	12
135	New Brunswick.....	Rutgers College Grammar School*.....	E. T. Tomlinson, A. M.....	1770	Reformed.....	7	1	163	.....	23
136	Rainfield.....	Mr. Leal's School.....	John Leal.....	1852	Non-sect.....	7	7	72	37	23
137	Princeton.....	Preparatory School*.....	J. R. Bishop.....	1874	Non-sect.....	4	4	51	.....	30
138	Summit.....	Summit Academy.....	James Heard, A. M.....	1852	Non-sect.....	4	4	42	27	30
NEW MEXICO.										
139	Las Vegas.....	Las Vegas College.....	S. Personé, s. J.....	1876	R. C.....	22	.....	208	78	.....
140	Nora.....	St. Mary's College.....	Edward de Hilder.....	1864	R. C.....	3	3	142	37	7
141	Santa Fé.....	St. Michael's College*.....	Brother Botolph.....	1883	R. C.....	10	.....	101	.....	.....
NEW YORK.										
142	Astoria (75 Main Street, L. I.).....	Astoria Latin School.....	Chas. Lyman Shaw.....	1869	.....	1	.....	16	13	.....
143	Brooklyn (185 Montague St.).....	Brooklyn Latin School for Boys.....	Cassie Harrison, M. A.....	1883	Non-sect.....	5	5	76	46	20
144	Brooklyn (44 Court Street).....	College Grammar School*.....	Rev. Levi W. Hart, A. M.....	1849	Non-sect.....	1	1	184	20	.....
145	Brooklyn (144 Park Place).....	Prospect Park Institute*.....	Richard D. Dodge.....	1893	Non-sect.....	3	3	34	.....	.....
146	Buffalo (247 Allen Street).....	English, Classical, and Mathematical School,*.....	Lucius E. Hawley, A. M.....	1885	Non-sect.....	1	1	20	.....	.....
147	Canandaigua.....	Canandaigua Academy*.....	J. Carlton Norris.....	1795	Non-sect.....	4	3	153	.....	.....
148	Clinton.....	Clinton Grammar School.....	Isaac O. Best, A. M.....	1815	Non-sect.....	2	3	87	58	52
149	Cornwall-on-the-Hudson.....	Cornwall Heights Seminary*.....	Charles H. Stone.....	1867	Presb.....	3	3	11	.....	.....
150	Croton Landing.....	Croton Military Institute*.....	Frank S. Roberts.....	1890	P. E.....	7	.....	30	.....	.....
151	Dobbs Ferry.....	Glen Tower School*.....	Fancher & Bailey.....	1886	Non-sect.....	8	8	45	.....	.....
152	Garden City.....	St. Paul's Cathedral School.....	Charles S. Moore, A. B.....	1878	Non-sect.....	17	1	140	.....	7
153	Hamilton.....	Colgate Academy*.....	James W. Ford, Ph. D.....	1872	Baptist.....	6	6	166	.....	.....
154	Manlius.....	St. John's Military School.....	William J. Wilkie.....	1869	P. E.....	6	6	28	18	12
155	New Brighton (S. I.).....	St. Austin's School.....	Rev. Alfred G. Mortimer, Ph. D.....	1886	P. E.....	8	8	86	36	11
156	New Brighton (S. I.).....	Trinity English and Classical School for Boys.....	J. M. Hawkins, A. M.....	1867	P. E.....	3	3	40	.....	23
157	Newburg.....	Siglar's Preparatory School*.....	Henry W. Siglar.....	1863	Non-sect.....	5	5	36	.....	.....
158	New York (117-119 West 125th St.).....	Barnard School.....	Hazen & French.....	1886	Non-sect.....	11	2	106	46	35
159	New York (6 East 44th St.).....	Berkeley School*.....	John S. White, LL. D.....	1880	Non-sect.....	10	4	208	.....	.....
160	New York (31 West 43d St.).....	Calhoun's School for Boys.....	A. Calhoun.....	1868	Non-sect.....	6	6	65	15	30
161	New York (721 Madison Ave.).....	Collegiate School.....	Rev. Henry B. Chapin, Ph. D.....	1820	Non-sect.....	9	2	86	49	22
162	New York (729 Sixth Ave.).....	Columbia Institute*.....	Edwin Fowler, A. E., M. D.....	1872	Non-sect.....	16	2	150	.....	.....
163	New York (20 West 43d St.).....	Cutler's Private School for Boys.....	Arthur H. Cutler, A. B.....	1876	Non-sect.....	11	3	115	85	.....
164	New York (1481 Broadway).....	Dwight School.....	Henry O. Miller.....	1880	Non-sect.....	7	7	65	55	61
165	New York (34 West 40th St.).....	Everson's Collegiate School for Boys.....	Duane S. Everson.....	1868	Non-sect.....	8	1	94	.....	.....
166	New York (20 West 59th St.).....	Fifth Avenue School for Boys.....	E. A. Gibbens and Dennis Beach.....	1866	Non-sect.....	8	8	69	.....	40
167	New York (378 Fifth Ave.).....	Lyon's Classical School*.....	Edward D. Lyon.....	1881	Non-sect.....	6	1	30	.....	.....

* Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION B.—*Private Schools for Boys.*—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.			Students.		
						Male.	Female.	Total.	Number in Academic Grade.	Preparing for College Course and Scientific Course in College or Scientific School.	Total.
1	2	3	4	5	6	7	8	9	10	11	12
PENNSYLVANIA—continued.											
222 Philadelphia (247 S. 13th St.).	Classical Institute.....	John W. Faries	1837	1837	Non-sect..	1	.....	1	14	.....	10
223 Philadelphia.....	Grant College for Orphans.....	.....	1832	1843	Non-sect..	18	37	55	1,528	328	43
224 Philadelphia (3303 Locust St.).	Martin's School for Boys	George F. Martin	1832	1879	P. E.	4	.....	4	43	.....	32
225 Philadelphia (700 N. Broad Street).	North Broad Street Select School	George Eastburn, M. A. ....	.....	1863	Non-sect..	10	2	12	146	120	63
226 Philadelphia (corner 8th and Chestnut Streets).	Rittenhouse Academy	De B. K. Ludwig.....	1854	.....	Non-sect..	7	.....	7	65	50	.....
227 Philadelphia (S. S. 12th St.).	William Penn Charter School	Richard M. Jones, M. A.	1711	1689	Friends ..	6	7	13	216	.....	.....
228 Washington	Trinity Hall	Charles A. Morrill .....	.....	1879	P. E.	4	.....	4	42	28	.....
229 West Philadelphia (233 S. 42d Street).	Hamilton School	Le Roy Bliss Peckham	1886	1880	Non-sect..	9	3	12	61	33	7
230 Wilkes Barre	Harry Hilman Academy	Edwin L. Scott, A. M., Ph.D.	1881	1878	Non-sect..	6	1	7	115	65	36
RHODE ISLAND.											
231 Providence.....	Berkeley School.....	Rev. Geo. Herbert Patter-son.....	1886	1883	P. E.	4	.....	4	42	17	24
232 Providence (63 Snow St.).	English and Classical School.....	Chas. B. Goff.....	.....	1864	Non-sect..	14	4	18	199	91	94
233 Providence (119 Franklin St.).	La Salle Academy.....	.....	.....	1871	R. C.	8	.....	8	275	.....	.....
234 Providence.....	University Grammar School*.....	M. and E. Lyon.....	.....	1764	Baptist....	4	.....	4	40	.....	.....
SOUTH CAROLINA.											
235 Charleston.....	High School of Charleston.....	Virgil C. Dibble, A. M.	1839	1839	Non-sect..	7	.....	7	175	140	7

236	Charleston (41 Meeting St.).	University School.	Walter D. McKenney.	1882	Non-sect.	2	2	43	5
237	Summerville.	Summerville High School*	John Gadsden.	1880	Non-sect.	2	2	40	
238	Williamston.	Male High School.	L. S. Mac Swain.	1887	Non-sect.	1	1	33	
TENNESSEE.									
239	Culleoka.	Culleoka Academy*	S. V. Wall and W. D. Mooney	1870	Non-sect.	2	1	115	
240	Nashville.	Montgomery Bell Academy.	S. M. D. Clark, A. M.	1868	Non-sect.	5	2	127	33
TEXAS.									
241	Brownsville.	St. Joseph's College.	Rev. P. F. Parisot.	1897	R. C.	4	4	50	
242	San Antonio.	St. Mary's College.	Rev. Fr. Feith.	1882	R. C.	15	15	359	
VERMONT.									
243	Burlington.	Vermont Episcopal Institute.	H. H. Ross.	1861	P. E.	4	2	39	15
VIRGINIA.									
244	Abingdon.	Abingdon Male Academy.	Arthur P. Wilmer.	1803	Non-sect.	6	6	101	0
245	Alexandria.	Episcopal High School.	L. M. Blackford, A. M.	1854	P. E.	2	2	52	38
246	Alexandria.	Potomac Academy.	John S. Blackburn.	1869	R. C.	4	4	47	24
247	Alexandria.	St. John's Academy.	Richard L. Carne, A. M.	1883	R. C.	1	1	45	8
248	Bellvue.	Bellevue High School.	W. R. Albot.	1866	Non-sect.	3	3	61	40
249	Bedford Academy.	Bethel Classical and Military Academy.	Maj. A. G. Smith.	1867	Non-sect.	6	6	61	59
250	Charlottesville.	Pantops Academy.	John R. Sampson.	1877	Non-sect.	5	5	58	48
251	Culpeper C. H.	Virginia Midland Academy.	John Horland and R. R. Powell.	1886	Non-sect.	4	4	70	40
252	Mitchell's Station.	Seven Islands High School.	Dr. F. S. Hall.	1881	Non-sect.	2	2	26	
253	New Canton.	Norfolk Academy.	Philip B. Ambler.	1883	Non-sect.	2	2	10	9
254	Norfolk.	University School.	R. W. Tunstall.	1894	Non-sect.	4	4	118	58
255	Petersburg.	Suffolk Military Academy*.	W. Gordon McCabe, A. M.	1865	Non-sect.	4	4	82	62
256	Suffolk.	Hanover Academy.	Joseph King, A. M.	1875	Non-sect.	4	4	60	
257	Taylorsville.	Fishburne School.	Henry P. Jones, A. M.	1849	Non-sect.	3	3	30	
258	Waynesboro.		Jas. A. Fishburne.	1879	Non-sect.	4	4	72	6
WASHINGTON TERRITORY.									
259	Tacoma.	Washington College.	D. S. Pulford, A. M.	1855	P. E.	4	2	60	
260	Vancouver.	Holy Angels' College*.	Rev. Fr. A. Becker.	1887	R. C.	5	5	150	
WEST VIRGINIA.									
261	Charlestown.	Charlestown Male Academy.	Edmund R. Taylor.	1795		2	2	50	
WISCONSIN.									
262	Franklin.	Mission House of the Reformed Church in the United States*.	H. A. Muehlmeier, D. D.	1803	Ger. Ref.	7	7	72	
263	Milwaukee.	Concordia College.	Rev. Ch. H. Loeber.	1886	Luth.	6	6	133	
264	Milwaukee.	Marquette College.	A. Besche.	1881	R. C.	15	15	208	30
265	Milwaukee (Van Buren St.).	Milwaukee Academy.	Isaac Thomas.	1864	Non-sect.	3	1	44	29
266	Mt. Calvary.	St. Lawrence College.	P. Alphonsus.	1888	R. C.	12	12	112	14
267	Prairie du Chien.	College of the Sacred Heart.	Rev. A. Leiter, S. J.	1861	R. C.	17	17	139	16
268	St. Francis.	Catholic Normal School*.	Charles Fessler.	1880	R. C.	7	7	52	
269	St. Francis.	Seminary of St. Francis*.	Very Rev. Joseph Rainer.	1871	R. C.	12	12	212	

* Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88.

DIVISION B.—*Private Schools for Boys.*—PART II.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	13	14	15	16	17	18	19	20
ALABAMA.									
1	High School for Boys.....	\$27-36	0	\$5,000	\$20,000	.....	.....	.....	\$5,000
2	Athens Male Academy.....	20-50	0	0	5,000	0	0	0	0
3	Livingston Male Academy.....	30-50	.....	30	3,500	.....	.....	\$250	.....
4	Marion Military Institute.....	50	250	150	60,000	0	0	0	.....
5	Towle's Institute for Boys.....	75-90	.....	300	12,000	.....	.....	.....	.....
6	St. Andrew's Academy.....	30-50	.....	.....	10,000	.....	.....	.....	.....
7	University High School.....	46	500	.....	25,000	.....	.....	0	0
CALIFORNIA.									
8	Belmont School.....	a500-600	500	300	35,000	.....	.....	.....	.....
9	McPherron Academy.....	50-80	.....	.....	1,800	0	.....	.....	.....
10	California Military Academy.*	50	1,324	.....	50,000	.....	.....	.....	.....
11	Hopkins Academy.....	60	500	2,000	50,000	\$30,000	.....	.....	.....
12	Sacket School*.....	50-80	.....	.....	.....	.....	.....	.....	.....
13	Sacred Heart College.....	40	2,500	500	100,000	.....	.....	.....	.....
14	Urban Hall.....	125	100	400	.....	0	0	0	0
15	Laurel Hall College.....	a400	300	2,500	30,000	.....	.....	.....	.....
16	St. Matthew's Hall.....	a450	500	250	.....	0	0	0	0
COLORADO.									
17	College of the Sacred Heart.	240	1,000	.....	200,000	.....	.....	.....	.....
18	Jarvis Hall.....	60	300	.....	30,000	.....	.....	.....	.....
CONNECTICUT.									
19	Black Hall School.....	a500	.....	100	10,000	.....	.....	.....	.....
20	Park Avenue Institute.....	60-100	500	0	25,000	0	0	.....	0
21	Curtis School for Boys.....	a500	.....	.....	.....	.....	.....	.....	.....
22	Episcopal Academy of Connecticut.	400	1,000	0	52,000	0	0	0	0
23	Wilson Grammar School.....	80-100	350	.....	15,000	.....	.....	.....	.....
24	Hopkins Grammar School.*	80	70	.....	3,000	.....	.....	.....	.....
25	Bulkeley School.....	0	100	0	40,000	65,000	\$4,500	0	0
26	Bett's Military Academy.....	450	300	.....	25,000	.....	.....	.....	.....
27	School for Boys*.....	100-150	200	.....	25,000	.....	.....	.....	.....
28	The Gunnery.....	50, 60	.....	.....	.....	.....	.....	.....	.....
29	Wilton Boarding School.....	250	.....	.....	10,000	.....	.....	0	.....
DISTRICT OF COLUMBIA.									
30	Linthicum Institute*.....	.....	.....	.....	.....	70,000	.....	.....	.....
31	Arlington Academy.....	60-100	.....	.....	.....	.....	.....	.....	.....
32	Columbian College Preparatory School.*	80	.....	.....	30,000	.....	.....	.....	6,500
33	Rittenhouse Academy.....	100	.....	200	5,600	.....	.....	.....	.....
34	St. John's College*.....	50	.....	.....	120,000	.....	.....	.....	.....
GEORGIA.									
35	Atlanta Baptist Seminary	8	2,080	.....	20,000	.....	.....	.....	6,000
36	Academy of Richmond County.*	.....	.....	.....	.....	.....	.....	.....	.....
37	St. Patrick's Commercial Institute.*	15-30	1,000	.....	20,000	.....	.....	.....	.....
38	Hearn Institute*.....	40	.....	.....	25,000	.....	.....	.....	15,000
39	Slade's School for Boys.....	50	.....	250	1,500	.....	.....	.....	.....
40	University High School.....	54	.....	.....	.....	.....	0	0	0
41	Marietta Male Academy.....	20-40	.....	100	2,500	.....	.....	200	.....

* Statistics of 1886-87.

a Includes board.

TABLE 42—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION B.—Private Schools for Boys.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	13	14	15	16	17	18	19	20
	GEORGIA—continued.								
42	Johnston Institute.....	\$20	.....	.....	\$500	.....	.....	.....	.....
43	Savannah Academy.....	90	a300	.....	8,000	0	0	0	0
44	Sacred Heart Seminary....	20	.....	.....	.....	.....	.....	.....	.....
	ILLINOIS.								
45	German Evangelical Lutheran School.*	0	3,000	.....	50,000	.....	.....	.....	.....
46	Bunker Hill Academy*....	6350	500	.....	30,000	.....	.....	.....	.....
47	Allen Academy*.....	.....	.....	.....	.....	.....	.....	.....	.....
48	German-American Academy.*	40-100	700	.....	25,000	.....	.....	.....	.....
49	The Harvard School.....	100-250	300	\$600	25,000	0	0	0	.....
50	University School.....	125-200	.....	.....	.....	.....	.....	.....	.....
51	Evangelical Proseminary..	150	1,500	200	70,000	.....	.....	.....	\$757
52	Whipple Academy*.....	35	9,000	.....	.....	.....	.....	.....	.....
53	Morgan Park Military Academy.	400	400	250	30,000	.....	.....	.....	.....
	INDIANA.								
54	Classical School for Boys..	60-100	.....	.....	10,000	.....	.....	.....	.....
	INDIAN TERRITORY.								
55	Spencer Academy*.....	.....	300	.....	18,000	.....	.....	.....	.....
56	Cherokee National Male Seminary.	0	300	150	120,000	.....	.....	\$15,000	0
	IOWA.								
57	Kemper Hall*.....	6375	8,000	.....	50,000	.....	.....	.....	.....
58	Wartburg College.....	.....	1,168	1,500	13,200	.....	.....	.....	2,700
	KENTUCKY.								
59	Cecilian College.....	200	1,000	.....	30,000	.....	.....	.....	.....
60	Rugby School.....	75	100	200	.....	.....	.....	.....	.....
61	Preparatory and Select School of the Abbey.	.....	500	0	7,500	\$3,500	\$340	0	.....
62	Lancaster Male Seminary..	40	.....	.....	1,500	.....	.....	.....	.....
63	Alleghen Academy.....	80	250	30	20,000	.....	.....	.....	.....
64	Louisville Military Academy.	100	1,000	1,000	75,000	0	0	0	.....
65	Louisville Rugby School.	85-135	.....	1,500	8,500	0	0	.....	.....
66	Shelbyville Male Academy.	50	.....	500	2,500	.....	.....	.....	.....
	LOUISIANA.								
67	Leche's Graded Institute..	60	200	5,000	30,000	0	0	0	.....
68	St. Isidore's College*....	30	0	.....	.....	.....	.....	.....	.....
69	Thibodeaux College.....	180	.....	.....	5,000	.....	.....	.....	.....
	MAINE.								
70	Abbott Family School*....	250-300	2,000	.....	.....	.....	.....	.....	.....
71	Franklin Family School...	6300	450	.....	4,000	.....	.....	.....	.....
	MARYLAND.								
72	English, German, and Classical School.	50-125	.....	.....	.....	.....	.....	.....	.....
73	Oxford School for Boys*...	125	.....	.....	.....	.....	.....	.....	.....

* Statistics of 1886-87.

a Private library.

b Includes board.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION B.—*Private Schools for Boys.*—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	13	14	15	16	17	18	19	20
	MARYLAND—continued.								
74	St. Joseph's Academy (Calvert Hall).*	\$24-48	4,000	.....	.....	.....	.....	.....	.....
75	School for Boys.....	130-160	0	0	\$5,000	0	0	0	0
76	Wright's University School.	100	.....	\$50	10,000	.....	.....	0	0
77	Ammendale Normal Institute.*	.....	800	.....	60,000	.....	.....	.....	.....
78	Brookeville Academy.....	40	0	.....	5,000	.....	.....	.....	.....
79	Mt. St. Joseph's College.....	220	4,500	.....	65,000	.....	.....	.....	.....
80	Charlotte Hall School.....	15	6,000	4,000	25,000	\$2,600	.....	\$2,600	.....
81	College of St. James Grammar School.*	a300	.....	.....	12,000	.....	.....	.....	.....
82	West Nottingham Academy.	30-40	200	.....	7,000	.....	.....	500	.....
83	Maupin's University School.	60-80	200	.....	12,000	.....	.....	.....	.....
84	Frederick College.....	25-60	2,000	75	10,000	0	0	800	0
85	McDonogh Institute.....	0	2,500	1,000	300,000	705,000	\$38,900	0	.....
86	St. George's Hall for Boys.	250-300	800	300	20,000	0	0	0	0
87	Upper Marlborough Academy.	0	275	50	2,000	0	0	1,200	\$25
	MASSACHUSETTS.								
88	Phillips Academy.....	60	2,800	3,000	100,000	244,531	13,138	.....	1,500
89	Private Classical School*..	200	.....	.....	.....	.....	.....	.....	.....
90	Private School for Boys*..	200	.....	.....	.....	.....	.....	.....	.....
91	Carleton's School for Young Men and Boys.*	125	.....	.....	15,000	.....	.....	.....	.....
92	Day and Family School for Boys.*	150	.....	.....	.....	.....	.....	.....	.....
93	Scientific Preparatory School.	150	600	200	10,000	0	0	0	0
94	Williston Seminary.....	63	2,000	10,000	150,000	355,000	15,000	0	0
95	Sedgwick Institute.....	75	3,000	.....	.....	.....	.....	.....	.....
96	Groton School.....	a530	700	150	120,000	.....	.....	.....	2,000
97	Mt. Hermon Academy.....	a100	2,300	250	250,000	.....	.....	.....	.....
98	Allen Home School.....	75-125	1,000	.....	.....	.....	.....	.....	.....
99	Home School for Boys*..	a600	2,000	.....	15,000	.....	.....	.....	.....
100	English and Classical School.	a200	1,000	0	5,000	0	0	0	0
101	St. Mark's School.....	500	1,500	200	20,000	.....	.....	.....	500
102	Dummer Academy*.....	a450	600	.....	25,000	10,000	.....	.....	.....
103	Greylock Institute.....	50	500	400	50,000	0	0	0	0
104	Edwards Place School.....	600	500	.....	.....	.....	.....	.....	.....
105	Highland Military Academy.	350	700	1,500	50,000	.....	.....	.....	.....
106	Worcester Academy.....	30-45	500	1,000	200,000	81,000	4,300	.....	43,000
	MICHIGAN.								
107	Michigan Military Academy.	350	800	500	125,000	.....	.....	.....	.....
	MINNESOTA.								
108	Shattuck School.....	60	1,000	2,500	250,000	15,000	1,200	.....	12,900
109	Evangelical Lutheran School.	25	1,000	.....	35,000	.....	.....	.....	2,534
110	Lake View Academy*.....	50	200	.....	11,000	.....	.....	.....	.....
	MISSISSIPPI.								
111	Okolona Male Academy*..	.....	.....	.....	10,000	.....	.....	.....	.....
112	Jefferson College.....	30	2,400	100	30,000	45,000	4,100	0	0

* Statistics of 1886-87.

a Includes board.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION B.—Private Schools for Boys.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	13	14	15	16	17	18	19	20
	MISSOURI.								
113	Kemper Family School....	\$110	1,500	\$500	\$30,000	0	0	0	0
114	St. Paul's College.....	20			8,000				\$60
115	Wentworth Male Academy.	33-53	200	50	15,000	0	0	0	0
116	St. James Military Academy.	a325	0	500	20,000				10,000
117	Educational Institute.....	40-100	1,150	200	32,000	0	0	0	0
118	Lutheran High School.....	40						0	
119	Smith Academy	70-100	0	2,000	75,000	0	0	0	0
	NEW HAMPSHIRE.								
120	St. Paul's School*.....	40	5,000						
121	Phillips Exeter Academy.	60							
	NEW JERSEY.								
122	Academic Department of German Theological School of Newark, N. J.	0	3,700	600	18,222	\$33,700	\$1,100	0	601
123	Adelphic Institute.....								
124	Bordentown Military Institute.	a275-325			20,000				
125	West Jersey Academy.....	50	200	50	40,000				1,000
126	Seeley's Home School for Boys.	a280			10,000				
127	English and Classical School.	106							
128	Freehold Institute *	50-80	1,500		50,000				
129	Stevens High School.....	75-150		1,000	50,000	0	0	0	0
130	Courtland Place School.....	100	2,500	600	20,000				
131	Lawrenceville School.....	100		2,000	800,000	400,000	25,000		
132	Morris Academy.....	100-140	0	300		0	0	0	0
133	Mt. Holly Academy.....	40-60	500	100	10,000	0	0	0	0
134	Newark Academy.....	50-120	200	800	50,000	15,000	750	0	0
135	Rutgers College Grammar School.*	52-72			50,000				
136	Mr. Leal's School.....	100	0	300	6,000	0	0	0	0
137	Preparatory School*.....	100	100		30,000				
138	Summit Academy	125	200	100	10,000				
	NEW MEXICO.								
139	Las Vegas College	30	4,000						
140	St. Mary's College	20	60		3,000			\$120	
141	St. Michael's College *	20	1,500		20,000				
	NEW YORK.								
142	Astoria Latin School.....	75							
143	Brooklyn Latin School for Boys.	175							
144	College Grammar School*	60	250						
145	Prospect Park Institute*								
146	English, Classical and Mathematical School.*	60-140	50						
147	Canandaigua Academy *	40	2,000		35,000				
148	Clinton Grammar School..	40	564	300	4,000			183	165
149	Cornwall Heights Seminary*.	a500	200		20,000				
150	Groton Military Institute*	75	500		50,000				
151	Glen Tower School*.....	100-150			60,000				
152	St. Paul's Cathedral School	400	1,200	750	800,000	0	0	0	0

* Statistics of 1886-87.

a Includes board.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION B.—Private Schools for Boys.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	13	14	15	16	17	18	19	20
	NEW YORK—continued.								
153	Colgate Academy *	\$33	1,600	.....	\$53,000	.....	.....	.....	.....
154	St. John's Military School	400	300	.....	100,000	.....	.....	.....	.....
155	St. Austin's School.....	250	.....	.....	200,000	.....	.....	.....	.....
156	Trinity English and Classical School for Boys.	120-100	1,200	\$3,000	20,000	0	0	0	0
157	Siglar's Preparatory School.*	100	450	.....	30,000	.....	.....	.....	.....
158	Barnard School.....	80-240	1,000	500	60,000	.....	.....	.....	.....
159	Berkeley School*.....	300	500	.....	200,000	.....	.....	.....	.....
160	Callisen's School for Boys	200	.....	.....	25,000	.....	.....	.....	.....
161	Collegiate School.....	80-260	.....	.....	.....	.....	.....	.....	.....
162	Columbia Institute *	90-300	200	.....	.....	.....	.....	.....	.....
163	Cutler's Private School for Boys.	250-400	250	.....	.....	.....	.....	.....	.....
164	Dwight School.....	150-250	.....	.....	.....	.....	.....	.....	.....
165	Ererson's Collegiate School for Boys.	.....	.....	.....	.....	.....	.....	.....	.....
166	Fifth Avenue School for Boys.	200	150	.....	75,000	.....	.....	.....	.....
167	Lyons' Classical School*.....	200-300	.....	.....	.....	.....	.....	.....	.....
168	McMullen's Private School for Boys.	100-240	500	0	0	0	0	0	0
169	Richards' School for Boys..	.....	150	.....	.....	.....	.....	.....	.....
170	St. Louis College	100-250	2,000	.....	.....	.....	.....	.....	.....
171	University Grammar School.*	50-250	.....	.....	.....	.....	.....	.....	.....
172	Woodbridge School.....	75-300	350	250	.....	.....	.....	.....	.....
173	Mohegan Lake School*.....	80	350	.....	20,000	.....	.....	.....	.....
174	Peekskill Military Academy.	100	1,500	500	40,000	.....	.....	.....	.....
175	Worrall Hall.....	240	1,000	700	30,000	0	0	0	0
176	Poughkeepsie Military Academy.	100	500	400	30,000	0	0	0	0
177	Riverview Military Academy.	250	500	350	85,000	.....	.....	.....	.....
178	Classical and English School.*	100	0	.....	.....	.....	.....	.....	.....
179	Fort Hill School*.....	50-125	250	.....	250	.....	.....	.....	\$250
180	Hale's Classical and Scientific School *	200	0	.....	.....	.....	.....	.....	.....
181	Wagner Memorial Lutheran College.	32	150	.....	15,000	.....	.....	.....	.....
182	The Bryant School.....	400	1,000	.....	100,000	.....	.....	.....	.....
183	Holbrook's Military School.	80	650	300	25,000	0	0	0	0
184	Mount Pleasant Military Institute.	125	11,984	1,200	100,000	0	0	0	0
185	St. John's School *.....	2600	1,000	.....	75,000	.....	.....	.....	.....
186	St. Mary's Academy *.....	40	1,000	.....	40,000	.....	.....	.....	.....
187	Troy Academy.....	66	250	246	16,000	0	0	\$129	0
188	Boys' Boarding School.....	160-340	1,100	.....	30,000	.....	.....	.....	.....
189	Alexander Institute.....	100	1,000	500	20,000	0	0	0	0
190	Professor Davison's Institute.	120	1,000	.....	7,000	.....	.....	.....	0
	NORTH CAROLINA.								
191	Asheville Military Academy.	60	.....	.....	5,000	.....	.....	.....	.....
192	St. Mary's College.....	270	.....	900	.....	.....	.....	.....	.....
193	Bingham School.....	100	5,000	.....	30,000	0	0	0	0
194	Clinton Male Academy.....	80	.....	.....	1,000	.....	.....	.....	.....
195	Buckhorn Academy.....	20	1,200	.....	1,000	.....	.....	.....	.....

* Statistics of 1886-87.

α Includes board.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION B.—Private Schools for Boys.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	13	14	15	16	17	18	19	20
	NORTH CAROLINA—cont'd.								
196	Concord Male High School.	\$12-35	100	.....	\$1,500	.....	.....	.....	.....
197	Jackson Male Academy...	12-20	0	0	800	.....	.....	0	0
198	Horner School	60	1,000	.....	25,000	.....	.....	.....	.....
199	Raleigh Male Academy....	40-50	0	0	5,000	0	0	0	0
200	Vine Hill Male Academy....	.....	.....	.....	3,500	.....	\$550	.....	.....
201	Shelby Military Institute.*	15-45	500	.....	2,700	.....	.....	.....	.....
202	Statesville Male Academy.	25-40	.....	.....	2,500	.....	.....	.....	.....
203	Morrelle's English and Classical School.	36-56	2,000	\$300	5,000	.....	.....	.....	.....
204	Cape Fear Academy.....	36-54	100	100	.....	.....	.....	.....	.....
	OHIO.								
205	Collegiate School	100-180	.....	.....	.....	.....	.....	.....	.....
206	Franklin School*.....	175	.....	.....	14,000	.....	.....	.....	.....
207	St. Francis Gymnasium....	30	.....	.....	.....	.....	.....	0	.....
208	Brooks Military Academy...	100-150	300	.....	28,000	0	0	0	\$1,000
209	St. Mary's Institute*.....	30	3,000	.....	150,000	.....	.....	.....	.....
	OREGON.								
210	Bishop Scott Grammar School.	40-60	1,000	.....	100,000	\$10,000	1,500	.....	100
211	St. Michael's College.....	.....	500	500	15,000	.....	.....	.....	.....
	PENNSYLVANIA.								
212	Bethlehem Academy*.....	40-80	.....	.....	.....	.....	.....	.....	.....
213	Preparatory School for Lehigh University.	100	1,250	1,000	.....	.....	.....	.....	.....
214	Chambersburg Academy...	60	500	150	20,000	.....	.....	.....	.....
215	Germantown Academy....	50-125	700	500	150,000	0	0	.....	.....
216	The Yeates Institute.....	25-60	25	50	15,000	45,000	2,455	0	0
217	Nazareth Academy.....	295	5,000	1,000	50,000	0	.....	0	0
218	Treemount Seminary*.....	54-80	1,400	.....	40,000	.....	.....	.....	.....
219	St. Mary's Preparatory College.	200	3,000	0	14,000	0	0	0	0
220	Cheltenham Academy.....	150	300	.....	60,000	0	.....	.....	.....
221	Academy of the Protestant Episcopal Church.	100-150	.....	.....	.....	.....	.....	.....	.....
222	Classical Institute.....	100-150	.....	.....	25,000	.....	.....	.....	.....
223	Girard College for Orphans.	0	9,746	4,335	3,150,000	10,831,720	917,050	0	.....
224	Martin's School for Boys.	120-300	1,000	.....	1,000	.....	.....	.....	.....
225	North Broad Street Select School.	70-160	400	300	.....	.....	.....	.....	.....
226	Rittenhouse Academy.....	80-100	0	500	0	0	0	0	0
227	William Penn Charter School.	125-150	500	500	80,000	75,000	3,500	.....	.....
228	Trinity Hall	400	.....	.....	75,000	.....	.....	.....	.....
229	Hamilton School	50-150	.....	.....	.....	.....	.....	.....	.....
230	Harry Hillman Academy..	50-100	300	2,500	40,000	.....	.....	.....	.....
	RHODE ISLAND.								
231	Berkeley School.....	100-140	0	300	0	0	0	0	0
232	English and Classical School.	60-125	1,000	1,500	100,000	.....	.....	.....	.....
233	La Salle Academy	30	1,000	.....	.....	.....	.....	.....	.....
234	University Grammar School.*	50-125	.....	.....	.....	.....	.....	.....	.....

* Statistics of 1886-87.

α Includes board.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION B.—Private Schools for Boys.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	13	14	15	16	17	18	19	20
	SOUTH CAROLINA.								
235	High School of Charleston.	\$40	100	\$500	\$15,000	.....	\$4,000	\$4,000	.....
236	University School.....	80-125	.....	.....	.....	.....	.....	.....	.....
237	Summerville High School.*	40	0	.....	0	.....	.....	.....	.....
238	Male High School.....	30	0	0	2,000	0	0	60	.....
	TENNESSEE.								
239	Culleoka Academy*.....	50	1,675	.....	4,000	.....	.....	.....	.....
240	Montgomery Bell Academy.	71	200	200	20,000	\$50,000	3,000	0	0
	TEXAS.								
241	St. Joseph's College.....	2	.....	.....	25,000	.....	.....	.....	\$1,000
242	St. Mary's College*.....	5-25	.....	.....	50,000	.....	.....	.....	.....
	VERMONT.								
243	Vermont Episcopal Institute.	a300	2,000	200	25,000	0	0	0	0
	VIRGINIA.								
244	Abingdon Male Academy.	50-75	0	0	12,500	0	0	0	0
245	Episcopal High School.....	90	0	0	20,000	0	0	0	0
246	Potomac Academy.....	50-90	.....	125	5,200	.....	.....	.....	.....
247	St. John's Academy.....	40	1,100	700	12,000	0	0	0	0
248	Bellevue High School.....	125	5,000	.....	20,000	.....	.....	.....	.....
249	Bethel Classical and Military Academy.	60	2,000	350	25,000	25,000	3,000	0	0
250	Pantop's Academy.....	60	1,200	50	30,000	0	0	0	0
251	Virginia Midland Academy.	50	.....	.....	8,000	.....	.....	.....	0
252	Mt. Welcome High School.	a206	500	.....	4,000	.....	.....	.....	.....
253	Seven Islands School.....	50	700	.....	5,000	.....	.....	.....	.....
254	Norfolk Academy.....	60	.....	.....	50,000	.....	.....	.....	.....
255	University School.....	75	5,000	.....	13,000	.....	.....	.....	.....
256	Suffolk Military Academy.*	.....	.....	.....	8,000	.....	.....	.....	.....
257	Hanover Academy*.....	a300	1,000	.....	15,000	.....	.....	.....	.....
258	Fishburne School.....	50	500	.....	12,000	.....	.....	0	0
	WASHINGTON TERRITORY.								
259	Washington College.....	40-50	400	.....	60,000	50,000	3,000	0	.....
260	Holy Angels College*.....	.....	6,000	.....	.....	.....	.....	.....	.....
	WEST VIRGINIA.								
261	Charlestown Male Academy.	40-60	.....	.....	.....	.....	.....	.....	.....
	WISCONSIN.								
262	Mission House of the Reformed Church in the United States.*	20	4,500	.....	.....	.....	.....	.....	7,600
263	Concordia College.....	.....	800	1,500	75,000	.....	.....	.....	.....
264	Marquette College.....	60	5,000	3,500	130,000	.....	.....	.....	1,800
265	Milwaukee Academy.....	80-120	300	400	18,000	.....	.....	.....	.....
266	St. Lawrence College.....	30	1,800	300	40,000	.....	.....	0	.....
267	College of the Sacred Heart	.....	.....	.....	.....	.....	.....	.....	.....
268	Catholic Normal School*.....	175	600	.....	75,000	.....	.....	.....	.....
269	Seminary of St. Francis.....	a165	12,000	.....	180,000	.....	.....	.....	.....

* Statistics of 1886-87.

a Includes board.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88.
DIVISION C.—Private Schools for Both Sexes.—PART I.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.			Students.				Preparing for College or Scientific Course
						Male.	Female.	Total.	Male.	Female.	Total.	Number in Academic Grade.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
ALABAMA.													
1 Andrews Institute	Andrews Institute*	Jeff Roberts	1876	1874	M. E.	1	1	2	35	27	62	.....	.....
2 Ashland	Ashland High School	Riddle and Leveritt .....	.....	1878	.....	2	2	4	100	107	207	77	6
3 Athens (box 90)	Trinity School	Miss M. F. Wells .....	.....	1865	Non-sect.	0	4	4	63	97	160	22	7
4 Camden	Wilcox Male and Female Institute*	W. C. Jones	1849	1849	Non-sect.	3	5	8	78	57	135	.....	.....
5 Centreville	Centreville College	W. D. Cooper	1885	1885	Non-sect.	2	3	5	49	37	86	66	.....
6 Fort Deposit	Fort Deposit Institute	W. P. Stolt .....	.....	1870	Non-sect.	2	3	5	61	49	110	.....	.....
7 Furman	Furman Academy	Edward Y. McMorris .....	.....	1840	Non-sect.	2	3	5	38	39	77	9	5
8 Gaylesville	Gaylesville High School	Rev. S. L. Russell, A. M.	1876	1871	Non-sect.	2	3	5	85	62	147	98	1
9 Greenville	South Alabama College	J. B. Little, A. M., president ..	1876	1871	Baptist	2	5	7	75	112	187	.....	3
10 Grove Hill	Male and Female School*	J. F. Gillis .....	.....	1872	Non-sect.	1	1	2	41	38	79	.....	15
11 Havana	Travis Academy*	N. A. Pattillo, B. S. ....	.....	.....	Non-sect.	2	3	5	23	17	40	.....	.....
12 Jasper	Jasper High School	Edwin H. Foster .....	.....	1870	Ger. Ev. L.	1	0	1	8	14	22	.....	.....
13 Mobile	German Evangelical Lutheran School	W. Weinbach .....	.....	1884	Non-sect.	2	2	4	71	80	151	74	20
14 Opelika	Opelika Seminary	Banks and Lamar .....	.....	1886	Non-sect.	2	1	3	30	33	63	31	6
15 Piedmont Hill	Piedmont Hill High School	Wm. M. Webb, A. B. ....	.....	1881	Non-sect.	1	1	2	46	54	100	35	29
16 Pine Apple	Moore Academy	Jno. M. Webb	1882	1881	Non-sect.	2	2	4	81	79	160	26	17
17 Prattville	Prattville Academy	C. S. Deane	1880	1885	.....	1	1	2	13	6	19	.....	.....
18 Reubap	Reubap Institute*	E. J. Gectors .....	.....	1870	Non-sect.	1	3	4	75	75	150	100	20
19 Rome	Rome Institute	Leandus Jones .....	.....	1853	Non-sect.	2	3	5	80	91	171	85	11
20 Six Mile	Six Mile Academy	E. H. Pratt .....	.....	.....	Non-sect.	2	3	5	.....	.....	.....	.....	.....

* Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.		Students.			
						Male.	Female.	Total.	Male.	Female.	Total.
1	2	3	4	5	6	7	8	9	10	11	12
ALABAMA—continued.											
21	Springville.....			1887	Cong.....	1	2	3	65	60	125
22	Talladega.....	S. A. Ellis.....	1869	1869	Cong.....	7	10	17	187	217	404
23	Wetumpka.....	J. A. Liner.....				1	1	2	27	33	60
ARKANSAS.											
24	Altus.....	Rev. A. C. Millar, A. B.....	1896	1896	M. E. So ..	3	3	6	83	57	140
25	Arkadelphia.....	J. W. Conner.....	1887	1896	Baptist ..	4	6	10	136	118	254
26	Booneville.....	Robert W. Donkust.....	1875	1873	M. E. So ..	2	1	3	42	43	85
27	Clinton.....	G. B. Hodge.....	1879	1879	Non-sect ..	1	3	4	37	22	59
28	Evening Shade	Alfred Mitchell.....	1883	1883	Non-sect ..	1	2	3	120	65	185
29	Helena.....	W. S. White.....	1878	1878	Non-sect ..	1	3	4	40	84	124
30	La Crosse.....	M. Shelby Kornard, A. M., president.....	1881	1869	Non-sect ..	3	3	6	69	27	96
31	Quinnan.....	Rev. O. H. Tucker, A. B.....	1871	1871	M. E. So ..	2	3	5	45	54	99
32	Rogers.....	Rev. J. W. Seay, A. M.....	1883	1881	Cong.....	2	3	5	111	99	210
33	Searcy.....	W. H. Tharp.....		1883	Non-sect ..	5	8	13	110	160	270
CALIFORNIA.											
34	Brooklyn.....	Sisters of Mercy	1881	1877	R. C	0	4	4	26	107	133
35	Colusa.....	A. M. Armstrong.....	1887	1887	Non-sect ..	2	0	2	27	21	48
36	Heldsburg	William C. Grainger.....	1882	1882	7th D. A ..	7	7	14	109	111	220

37	Irvington	Washington College *	J. H. McCullough, A. M., president.	1871	1872	Christian..	4	3	7	42	20	62	.....
38	Lakeport.....	Lakeport Academy.....	John Overholser.....	1884	1884	.....	1	1	2	36	36	72	52
39	Marysville.....	College of Notre Dame.....	Sister M. Alencie.....	1876	1866	R. C.	9	9	56	114	170	11	13
40	Placerville.....	Placerville Academy.....	George F. Findall.....	.....	1861	Non-sect..	1	4	5	40	50	90	5
41	Red Bluff.....	Red Bluff College *	Hamilton Sullivan, A. M., M. D.	.....	1878	Non-sect..	4	3	7	35	48	83	.....
42	Sacramento (6th Street, be- tween J and K).	Howe's High School *	Edward P. Howe.....	.....	1873	.....	2	2	25	30	55	.....	.....
43	San Francisco (129 Haight Street).	Westminster School *	Rev. James Matthews, D. D.	1859	1859	Presb.....	3	3	6	27	19	46	.....
44	Visalia.....	Normal School.....	R. E. Johnston.....	.....	1876	.....	2	1	3	28	32	60	17
COLORADO.													
45	Longmont	Longmont College.....	Rev. W. O. Thompson, presi- dent.	1884	1885	Presb.....	4	1	5	28	20	48	11
46	Salida.....	Salida Academy	Rev. James Rodgers, A. M.....	1884	1884	Presb.....	1	1	2	18	27	45	.....
47	Trinidad.....	Tillotson Academy.....	H. E. Gordon.....	1879	1880	Cong.....	2	3	5	42	63	105	50
CONNECTICUT.													
48	Baltic.....	Academy of the Holy Family.....	Mother M. Carola.....	1875	1875	R. C. ....	.....	8	8	90	60	150	.....
49	Cotchesnot.....	Bacon Academy.....	O. H. Adams.....	1801	1803	Non-sect..	1	1	2	26	25	51	7
50	Durton.....	Ethawood School.....	Myra J. Davis.....	1865	1865	Non-sect..	1	5	6	37	23	60	13
51	Myrtle Bridge.....	Myrtle Valley English and Classi- cal Institute.	John K. Buckley, A. M., LL. D.	1880	1868	Non-sect..	3	2	5	56	19	75	38
52	New Canaan.....	New Canaan Institute *	Mrs. E. F. Ayres.....	.....	1873	Christian..	2	2	2	23	30	.....	.....
53	New Preston	Upson Seminary.....	Rev. Henry Upson.....	.....	1869	Cong.....	2	0	2	9	2	11	7
54	Norfolk.....	Robbins School.....	Rev. James A. Towle, A. B.	1884	1884	.....	2	1	3	19	10	29	4
55	Norwell.....	Norwich Free Academy.....	Robert P. Keep.....	1856	1856	.....	5	5	10	136	136	272	8
56	Shambury.....	McLean Seminary.....	John B. McLean.....	.....	1879	Non-sect..	2	5	7	13	60	73	70
57	Southport.....	Seaside Seminary.....	Miss Augusta Smith.....	.....	1866	Non-sect..	2	4	6	12	28	40	6
58	Suffield.....	Connecticut Literary Institution.....	Martha H. Smith, A. M.....	1853	1883	Non-sect..	4	5	9	64	61	125	86
59	Wilton.....	Wilton Academy	Edward Olmstead.....	1817	1817	Cong.....	1	1	16	4	20	.....	.....
60	Woodbury.....	Parker Academy	Edgar H. Groat, A. B.	1851	1851	Non-sect..	1	1	2	30	30	60	.....
61	Woodstock.....	Woodstock Academy *	J. C. Stimpson, A. B.....	1801	1801	Non-sect..	2	1	3	14	20	34	5
DAKOTA.													
62	Arvilla.....	Arvilla Academy.....	Rev. J. A. Brown, M. A.....	1886	1886	Presb.....	1	4	5	20	38	58	11
63	Canton.....	Augustana College	M. D. Miller, A. M.....	1881	1881	Luth.....	2	2	4	58	59	97	13
64	Fargo.....	Fargo Academy.....	Norman W. Cary, A. M.....	1885	1885	Non-sect..	1	1	16	14	30	21	70
65	Grand Forks.....	St. Bernard's College	Mother Stanislaus.....	1885	1885	R. C.	8	8	125	170	255	85	21
66	Groton.....	Groton College.....	Rev. Jas. A. Marshall, M. A.....	1885	1885	Presb.....	5	2	7	42	23	65	20
67	Janestown	Janestown College *	N. M. Cronr, A. M.....	1883	1883	Presb.....	4	3	7	35	53	88	42
68	Redfield.....	Redfield College.....	Rev. David Beaton.....	1887	1887	Cong.....	4	3	7	26	42	68	4
69	Scotland.....	Scotland Academy.....	Alexander Strachan, A. M.....	1886	1886	Presb.....	4	2	6	.....	.....	75	3
70	Sioux Falls	All Saints School *	Miss Helen S. Penbody.....	1885	1885	P. E.	2	7	9	25	49	74	0
71	Sioux Falls	Sioux Falls University	Rev. E. B. Meredith, A. M., D. D., president.	1885	1883	Baptist....	5	3	8	70	32	102	24
72	Yankton.....	Yankton College	Rev. Joseph Ward, D. D., president.	1881	1882	Cong.....	6	3	9	24	23	47	26

* Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—*Private Schools for Both Sexes.*—PART I—Continued

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.			Students.				Preparing for College Classical Course and Scientific Course or Scien- tific School.
						Male.	Female.	Total.	Male.	Female.	Total.	Number in Academic Grade.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
DELAWARE.													
73 Dover.....	Conference Academy.....	W. L. Gooding, Ph. D., pres- ident.....	1873	1873	Meth.....	4	4	8	80	76	156	121	12
74 Newark.....	Academy of Newark.....	Albert N. Raub, A. M., Ph. D.....	1769	1768	Non-sect.....	2	4	6	57	43	100	84	10
75 Wilmington (4th and West Streets).....	Friend's School.....	Isaac T. Johnson, A. M.....	.....	1748	Friends ..	4	6	10	107	78	185	110	4
DISTRICT OF COLUMBIA.													
76 Washington (1811 I Street) ..	Friend's Select School.....	Thomas W. Sidwell.....	.....	1883	Friends ..	2	7	9	91	34	125	39	.....
77 Washington (601 E. Capitol Street).....	St. Cecilia's Academy.....	Sister M. Aquina.....	1877	1868	R. C.....	.....	8	8	.....	.....	180	41	.....
FLORIDA.													
78 Daytona	Daytona Institute	Miss L. A. Cross .....	.....	1880	Cong .....	.....	6	6	10	20	30	6	10
79 De Land	De Land University	J. F. Forbes, A. M.....	1887	1883	Baptist.....	4	5	9	40	63	103	80	15
80 Gainesville	East Florida Seminary	Edwin P. Cater, A. M., su- perintendent.....	1883	1853	Non-sect.....	3	2	5	69	14	83	67	4
81 Jacksonville.....	Cookman Institute	Rev. S. B. Darnell, B. D.....	.....	1876	M. E.....	3	4	7	99	147	246	182	.....
82 Key West	Convent of Mary Immaculate.....	Sister M. Delphine, superior	1883	1868	R. C.....	.....	13	13	40	340	380	30	.....
83 Live Oak	Florida Institute *	Rev. J. L. A. Fish.....	.....	1880	Baptist.....	2	4	6	44	56	100	.....	2
84 Tallahassee	Seminary West of the Suwannee River.....	George M. Edgar, LL. D.....	1851	1857	Non-sect.....	2	2	4	26	50	76	.....	52

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.		Students.					
						Male.	Female.	Total.	Male.	Female.	Total.	Number in Academic Grade.	Preparing for College and Scientific Course in College or Scientific School.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
GEORGIA—continued.													
132	Smyrna.....	Smyrna High School*	.....	1881	.....	1	.....	1	34	36	70	34	2
133	Snow.....	Snow Spring High School.....	.....	1881	Non-sect.	1	1	2	34	22	56	34	5
134	Sparks.....	Male and Female Academy.....	.....	1884	Non-sect.	1	1	2	23	28	50	25	19
135	Stone Mountain.....	Stone Mountain High School.....	.....	1882	.....	1	2	3	80	60	140	50	19
136	Sugar Valley.....	Sugar Valley High School.....	.....	1882	Non-sect.	1	1	2	65	57	122	57	11
137	Sunnach.....	Sunnach Seminary.....	.....	1878	Non-sect.	1	1	2	75	40	115	55	6
138	Sumnerville.....	Sumnerville High School.....	.....	1883	Non-sect.	2	2	4	72	50	122	76	21
139	Talking Rock.....	High School.....	.....	1882	Non-sect.	2	1	3	40	25	65	8	7
140	Temple.....	Temple Academy*.....	.....	1875	Non-sect.	2	3	5	111	133	246	89	7
141	Thomaston.....	R. E. Lee Institute.....	.....	1875	Non-sect.	2	1	3	71	61	132	58	7
142	Toccoa.....	Toccoa Academy.....	.....	1881	Non-sect.	1	1	2	60	53	113	73	40
143	Villa Rica.....	Villa Rica High School.....	.....	1884	M. E. So.	2	1	3	64	46	110	49	40
144	Waleska.....	Waleska High School.....	.....	1872	Non-sect.	1	1	2	64	38	102	22	3
145	Whitesburg.....	Whitesburg Academy.....	.....	1872	Non-sect.	1	1	2	19	27	46	31	3
146	White Sulphur Springs.....	High School.....	.....	1865	Non-sect.	1	1	2	32	41	73	42	3
147	Woodville.....	Woodville High School.....	.....	1865	Non-sect.	1	1	2	54	60	114	42	3
148	Wrightsville.....	"Nannie Lou Warthen" Institute.....	.....	.....	M. E. So.	2	2	4	54	60	114	42	3
149	Zebulon.....	Zebulon High School.....	.....	.....	Non-sect.	1	1	2	51	40	91	46	3
IDAHO.													
150	Lewiston.....	Wilbur College*	.....	1885	M. E.	2	2	4	21	43	67	27	27
		Ira A. Richards.....	.....	1882	M. E.	2	2	4	21	43	67	27	27

ILLINOIS.													
151	Aledo	Aledo Academy	J. R. Wylie, A. M.	1874	Non-sect.	2	1	3	15	13	28	102	4
152	Anna	Union Academy of Southern Illinois.	Rev. W. W. Faris, D. D., and J. W. Stephens, A. M.	1881	Presb.	2	2	4	60	55	115	26	5
153	Aurora	Jennings Seminary *	Rev. W. Stephens, A. M.	1885	M. E.	4	6	10	116	100	216	26	9
154	Bunker Hill	Bunker Hill Academy	Rev. Cyrus C. Lovejoy, A. M.	1887	Non-sect.	2	1	3	20	20	40	35	26
155	Chicago (623 W. Adams St.)	German-American Academy	Rev. S. L. Silver, A. M.	1882	Non-sect.	4	3	7	65	10	75	24	...
156	Chicago (183 Maxwell St.)	German Institute	Robert Haentze	1871	Non-sect.	1	1	2	85	65	150	10	...
157	Chicago (16 Brown St.)	Lutheran Immanuel School	J. C. Stoeckle	1885	Luth.	6	1	6	324	290	614	...	...
158	Decatur	St. Teresa's Academy	H. Hattstaedt	1881	R. C.	4	4	4	100	120	220	...	...
159	Dover	Dover Academy *	Mother Teresa	1882	U. B.	1	1	2	17	19	36	...	6
160	Du Quoin	Du Quoin Seminary	A. A. Rothrock	1885	Presb.	2	1	3	21	19	40	...	35
161	East St. Louis	Howe Literary Institute.	Rev. A. T. Stone, A. M., M. D.	1855	Presb.	3	2	5	70	71	141	...	3
162	Elgin	Elgin Academy	Wm. Johnston	1873	Non-sect.	1	4	5	129	119	248	...	4
163	Fairfield	Hayward Collegiate Institute.	U. J. Hoffman, president.	1886	M. E.	3	6	9	115	165	290	...	1
164	Galesburg	St. Joseph's Academy	Sister M. Ephrem	1879	R. C.	14	14	14	30	26	56	...	1
165	La Harpe	Giddings Seminary	J. W. Cassell, A. M.	1879	M. P.	2	2	4	30	26	67	...	1
166	Loxa	Lee's Academy	T. J. Royer, A. M.	1871	Non-sect.	1	0	1	42	25	67	...	1
167	Mt. Morris	Mt. Morris College	J. G. Royer	1843	Ger. Bap.	8	2	10	125	95	220	...	161
168	Port Byron	Port Byron Academy	Mrs. E. T. Harper	1882	Cong.	1	2	3	35	24	59	...	15
169	Toulon	Toulon Academy	Fredrick L. Coombs	1882	Cong.	1	2	3	25	35	60	...	15
170	Vermilion Grove	Vermilion Academy	Theo. Reynolds, A. M.	1875	Friends	1	1	2	39	29	63	...	50
INDIANA.													
171	Bloomington	Friends' Bloomingdale Academy *	Andrew F. Mitchell	1859	Friends	1	2	3	50	32	82	...	...
172	Fairmount	Fairmount Academy	J. M. Dieckey	1884	Friends	2	1	3	76	59	135	...	...
173	Fort Wayne	Westminster Seminary	Mrs. C. B. Sharp and Mrs. D. B. Wells.	1883	Presb.	2	8	8	10	55	65	...	...
174	Indianapolis (407 N. Illinois Street).	Mrs. Price's School	Mrs. E. J. Price.	1868		1	1	1	15	25	40	...	...
175	Plainfield	Central Academy	Geo. W. White, A. B.	1831	Friends	2	1	3	...	...	75	...	6
176	Ronoke	Ronoke Classical Seminary	D. N. Howe, A. M.	1860	U. B.	4	2	6	120	60	180	...	25
177	Spiceland	Spiceland Academy	Thomas Newlin, S. B., superintendent.	1870	Friends	3	6	9	...	...	397	...	...
178	Vincennes	Vincennes University	E. A. Bryan, A. M., president	1806		3	6	9	76	12	88	...	3
179	Westfield	Union High School.	Erastus Test, M. D.	1879		3	5	8	89	70	159	...	5
INDIAN TERRITORY.													
180	Muskogee	Indian University *	A. C. Bacone, A. M., president	1881	Baptist	2	5	7	41	28	69	...	0
181	Vinita	Worcester Academy *	Rev. F. W. Hullinger	1882	Cong.	1	5	6	68	92	160	...	...
IOWA.													
182	Ackworth	Ackworth Institute.	W. G. Stanley, superintendent.	1868	Friends	1	1	2	41	39	80	...	72
183	Birmingham	Birmingham Academy	J. Wesley Wolf	1879	Non-sect.	1	1	2	25	23	48	...	28
184	Bloomfield	Normal and Scientific Institute.	R. S. Galen	1884	Non-sect.	5	3	8	52	92	144	...	...
185	Burlington	Burlington Institute	De Witt D. Forward, A. B.	1882	Baptist	3	4	7	15	30	45	...	...

* Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.
DIVISION C.—*Private Schools for Both Sexes.*—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.		Students.				Preparing for College and Classical Course and in College or Scientific School.	
						Male.	Female.	Male.	Female.	Total.	Number in Academic Grade.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
IOWA—continued.													
186 Burlington.....	First German Evangelical School.....	F. Claus.....	.....	1842	Evangelical.....	1	.....	1	31	24	55	.....	.....
187 Burlington.....	German Evangelical Zion School.....	F. G. Klein.....	.....	1864	Ger. Ev.	1	.....	1	25	25	50	.....	.....
188 Council Bluffs.....	Western Iowa College.....	W. S. Paulson.....	1884	1884	Non-sect.....	4	0	4	210	100	370	375	.....
189 Decorah.....	Decorah Institute.....	J. Breckenridge.....	.....	1872	Non-sect.....	3	2	5	267	231	498	.....	4
190 Denmark.....	Denmark Academy.....	Alfred S. Johnson, M. D., Ph. D. ....	.....	1843	Cong.....	1	3	4	30	27	57	39	9
191 Elkhorn.....	Danish High School*.....	Christian Anker.....	.....	1877	Ev. Luth.....	4	0	4	47	17	64	.....	.....
192 Epworth.....	Epworth High School*.....	Bourland D. Smith, Ph. D.....	1856	1857	Meth.....	4	5	9	125	115	240	.....	17
193 Hull.....	Pattersonville Educational Institute*.....	Rev. J. B. Chase.....	1884	1884	Cong.....	3	4	7	20	47	67	.....	13
194 Iowa City.....	Iowa City Academy.....	Robert H. Tripp, A. M.....	.....	1872	Non-sect.....	3	4	7	130	90	220	195	.....
195 Jefferson.....	Jefferson Academy.....	J. S. Dunning.....	1875	1875	Non-sect.....	3	2	5	43	42	85	47	.....
196 Knoxville.....	Knoxville Academy.....	W. A. McKee.....	.....	1872	Non-sect.....	1	.....	1	9	37	46	10	1
197 Le Grand.....	Friends' Academy.....	L. E. Kenworthy, A. B.....	.....	1876	Friends.....	1	1	2	39	24	54	59	13
198 New Providence.....	New Providence Academy.....	C. J. Michener, A. M.....	1869	1869	Friends.....	2	1	3	56	43	99	36	11
199 Newton.....	Hazel Dell Academy.....	G. W. Wornley.....	.....	1856	Non-sect.....	2	1	3	65	71	136	108	.....
200 New Vienna.....	St. Boniface's School.....	B. W. Schulte.....	1848	1850	R. C.....	2	1	3	120	130	250	100	.....
201 Orange City.....	North-western Classical Academy.....	J. A. De Spelder, A. M.....	1882	1883	Reformed.....	2	2	4	32	8	40	.....	.....
202 Osage.....	Cedar Valley Seminary.....	Alonzo Abernethy, Ph. D.....	1867	1863	Baptist.....	4	4	8	91	60	151	.....	.....
203 Pleasant Plain.....	Pleasant Plain Academy*.....	Albert H. Lloyd, B. S.....	1876	1876	Friends.....	2	0	2	35	35	70	.....	17
204 St. Ansgar.....	St. Ansgar Academy.....	Olavus O. Donhowe, A. E.....	.....	1878	Lutheran.....	2	2	4	51	32	83	.....	.....

205	Wilton.....	KANSAS.	Norton Normal and Scientific Academy.*	Brower and Parsons.....	1884	1866	Non-sect...	6	2	8	107	53	160	.....	11
206	Harlan.....		Gould College.....	Rev. Peter Wagner, A. M.....	1879	1881	U. B.....	2	2	4	20	30	50	.....	5
207	Lindcoln.....		Kansas Christian College.....	Thomas Bartlett, A. M.....	1884	1884	Christian.....	4	1	5	35	40	75	73	.....
208	Lindsborg.....		Bethany College.....	Edward Nelande, A. M., president.....	1886	1881	Lutheran.....	14	4	18	230	116	346	.....	191
209	Salina.....		Salina Normal University*.....	L. O. Thoroman, president.....	1883	1884	Non-sect.....	6	2	8	155	70	225	.....	.....
210	Tonganoxie.....		Friends' Academy*.....	William P. Trueblood.....	1884	1884	Friends.....	1	1	2	56	55	111	.....	.....
211	Wichita.....		Lewis Academy.....	James M. Naylor, A. M.....	1884	1886	Presb.....	2	8	10	114	211	325	172	6
212	Winfield.....		South-west Kansas College.....	John E. Earp.....	1885	1886	M. E.....	9	3	12	260	58	318	250	110
KENTUCKY.															
213	Bardstown.....		Male and Female Institute.....	H. J. Greenwell, A. M., president.....	1840	1885	Baptist.....	3	4	7	43	40	83	.....	53
214	Buffalo.....		East Lynn College.....	G. H. Watts.....	.....	1874	.....	1	1	2	35	30	65	.....	.....
215	Covington.....		Academy of Notre Dame.....	Mary Hildegard, Sister de Notre Dame.....	.....	1875	R. C.....	0	7	7	26	72	98	17	.....
216	Crab Orchard.....		Crab Orchard College.....	C. F. Duval.....	.....	1884	.....	1	2	3	.....	.....	63	.....	.....
217	Frankfort.....		Dudley Institute.....	T. M. Turner.....	.....	1878	Non-sect.....	2	0	2	39	19	58	.....	17
218	Fredonia.....		Fredonia Seminary.....	C. G. Morehead.....	1878	1878	Non-sect.....	2	2	30	70	40	110	25	.....
219	Jackson.....		Jackson Academy.....	John Jay Dickey.....	1884	1883	Non-sect.....	1	1	2	25	25	50	61	.....
220	La Fayette.....		La Fayette High School.....	S. L. Froese, A. M.....	.....	1860	Non-sect.....	1	2	3	50	43	93	61	.....
221	Leitchfield.....		Grayson Seminary.....	W. F. Arnold.....	.....	1882	Non-sect.....	1	2	3	40	50	90	35	1
222	Lexington.....		Lexington Normal Institute*.....	Rev. A. Hatch, A. B.....	.....	1866	Cong.....	5	1	6	57	159	216	.....	.....
223	Louisville.....		Presentation Academy.....	Sister Sophia.....	.....	1884	R. C.....	7	7	20	70	40	90	.....	.....
224	Olmstead.....		Prowder Institute.....	James C. Vick.....	1868	1866	.....	1	2	3	42	38	80	60	52
225	Princeton.....		Princeton Collegiate Institute.....	Rev. Heman H. Allen, D. D.....	1882	1880	Presb.....	1	6	7	59	73	132	52	4
226	Russellville.....		Miss Sevier's School.....	Miss Elizabeth Sevier.....	1864	1864	P. E.....	1	1	1	25	25	50	.....	.....
227	Sharsburg.....		Sharsburg Male and Female College*.....	Mrs. Fannie B. Talbot.....	1875	1839	.....	1	4	5	53	62	115	.....	.....
228	South Carrollton.....		West Kentucky Classical and Normal College*.....	E. B. Smith, A. M., president.....	1872	1872	Non-sect.....	4	3	7	68	136	291	.....	97
229	Wallonia.....		Wallonia Institute.....	George D. Free.....	.....	1857	Non-sect.....	1	1	2	62	44	106	17	41
230	Winchester.....		Male and Female High School.....	William Stewart, M. A., D. D.....	1877	1872	Non-sect.....	2	3	5	47	75	122	102	10
231	Wingo.....		Wingo College*.....	J. C. Neville.....	1884	1884	Baptist.....	2	1	3	25	33	55	.....	.....
LOUISIANA.															
232	Coushatta.....		Male and Female Institute.....	C. I. Davis, A. B.....	1887	1887	.....	1	3	4	65	61	126	26	.....
233	Mt. Lebanon.....		Mt. Lebanon College*.....	Rev. W. M. Reese, A. M., P. H. D., president.....	1853	1853	Baptist.....	7	7	14	89	85	174	.....	.....
234	New Orleans (185 North Rampart Street).....		Columbian Institute.....	Miss H. Fitz Gerald.....	.....	.....	R. C.....	2	8	10	20	50	70	.....	.....
235	New Orleans (7th district).....		German Evangelical Protestant School.....	H. Haverkamp.....	1871	1871	Ev. Prot.....	2	.....	2	38	40	78	.....	.....
236	New Orleans (372 Esplanade Street).....		Picard Institute.....	Madame A. Picard.....	.....	1880	R. C.....	2	14	16	30	50	120	15	.....

* Statistics of 1886-87.

255	Churchville	Holy Trinity School	Rev. Edward A. Colburn, A. M.	1869	P. E.	1	1	8	8	16
256	North-east	North-east Classical Seminary	W. L. Cooling	Presb.	1	1	6	6	12
MASSACHUSETTS.											
257	Ashburnham	Cushing Academy	H. S. Cowell, A. M.	1865	Non-sect.	5	3	62	71	133	33
258	Bedford	Sanderson Academy	Phoebe P. Hall	1821	Non-sect.	1	1	12	12	24
259	Bedford	Powers' Institute	E. L. Underwood, A. B.	1838	Non-sect.	1	2	3	30	75	1
260	Billerica	Howe School	Samuel Tucker, A. M.	1852	Non-sect.	1	1	13	17	30	0
261	Bolton	Houghton School	S. W. Ferguson	1849	Non-sect.	1	0	18	20	38	0
262	Boston (Boylston and Berkeley Streets)	Berkeley School	J. B. Taylor	1884	Non-sect.	7	14	103	30	133	30
263	Boston (259 Boylston Street)	Chauncy-Hall Private School	Ladd & Daniell	1828	Non-sect.	8	18	187	77	264	22
264	Brimfield	Hitchcock Free High School	Arthur A. Upham	1855	Non-sect.	2	4	29	49	78	5
265	Cambridge	Everett School	Miss Sarah H. Page	1865	Non-sect.	0	4	20	14	34	0
266	Cambridge (13 Bucking-ham Street)	Private School for Boys and Girls	Miss K. V. Smith	1879	Non-sect.	1	4	5	1	15	15
267	Deerfield	Deerfield Academy	W. P. White, A. B.	1876	Non-sect.	1	2	3	21	56	1
268	Dudley	Nichols Academy	Emerson G. Clark, A. M., C. E.	1819	Non-sect.	2	1	5	45	65	10
269	Duxbury	Partridge Academy	C. F. Jacobs	1829	Non-sect.	1	2	27	32	59	1
270	Fall River	Bradford-Matthew Chaloner-Durfee High School	W. H. Lambert	1849	Non-sect.	7	4	11	209	469	17
271	Falmouth	Lawrence Academy	S. A. Holton, A. B.	1853	Non-sect.	1	1	25	32	58	5
272	Franklin	Dean Academy	L. L. Burlington, A. M.	1865	Univ.	5	6	11	74	165
273	Groton	Lawrence Academy	Sanford L. Cutler	1793	Non-sect.	1	1	10	11	30	4
274	Hanover	Smith Academy	Frank W. Brett	1862	Non-sect.	1	0	1	20	30
275	Hatfield	William Orr, Jr., A. B.	1870	Non-sect.	1	2	3	17	29	46	8
276	Hingham	Deby Academy	Henry M. Wright, A. B.	1874	Non-sect.	1	2	3	12	27	5
277	Lawrence	Private School	Misses Peckard and Hunt	1881	Non-sect.	0	6	13	31	44
278	Marion	Tabor Academy	C. P. Howland	1877	Cong.	2	2	9	18	27	8
279	Middleborough	Tilton School	Amos H. Eaton	1854	Non-sect.	2	1	23	12	40	2
280	Monson	Monson Academy	D. M. Dustin, A. M.	1804	Non-sect.	2	4	43	35	78
281	Nantucket	Admiral Sir Isaac Coffin Lancasterian School	E. E. Fox	1827	Non-sect.	3	4	39	39	78	1
282	New Bedford	Friends' Academy	Thomas H. Eckfeldt	1812	Non-sect.	1	2	3	14	28	6
283	New Bedford	The Swain Free School	Andrew Ingraham	1881	Non-sect.	4	0	4	14	180
284	New Salem	New Salem Academy	Paul F. Ella, A. B.	1795	Non-sect.	2	16	16	32	32
285	Shelburne Falls	Arms Academy	Frederic Alisen Tupper, A. B.	1860	Non-sect.	2	2	4	55	106	6
286	Sherborn	Savin Academy	Horace W. Rice	1870	Non-sect.	1	1	2	33	69	2
287	South Braintree	Thayer Academy	J. B. Sewall, A. M.	1879	Non-sect.	5	1	6	54	94	33
288	South Lancaster	South Lancaster Academy	Geo. W. Caviness	1883	7 Day Ad.	3	6	9	61	116
289	Taunton	Bristol Academy	Frederic T. Farnsworth, A. M.	1792	Non-sect.	3	4	79	51	130	10
290	Westford	Westford Academy	William E. Frost, A. M.	1793	Non-sect.	1	1	2	26	60	8
291	West Newton	English and Classical School	Nathaniel T. Allen	1855	Unitarian.	7	8	15	74	101	35
292	Wilbraham	Wesleyan Academy	Rev. G. M. Steele, LL. D., president.	1824	M. E.	8	5	13	166	301	43
293	Williamstown	Glen Seminary	F. A. and M. P. Snyder	1876	0	2	2	12	19	3

* Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.			Students.				Preparing for College or Scientific Course in College or School.
						Male.	Female.	Total.	Male.	Female.	Total.	Number in Academic Grade.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
MICHIGAN.													
294	Adrian.....	F. R. Hathaway.....	.....	1849	Friends.....	2	1	3	43	47	90	72	22
295	Benzonia.....	S. B. Harvey.....	.....	1863	Cong.....	3	1	4	18	23	41	20	.....
296	Detroit (251-263 Lafayette Street, east).....	G. Herrmann.....	.....	1861	Non-sect.....	2	3	5	95	90	185	.....	.....
297	Spring Arbor Seminary.....	Rev. A. H. Stilwell, A. B.....	1872	1872	Fr. Meth.....	3	1	4	55	45	100	40	5
MINNESOTA.													
298	Excelsior.....	Rev. I. L. Cory, secretary of board.....	1884	1884	Cong.....	.....	3	3	20	30	50	.....	4
299	Hokah.....	Sister M. Ludovica.....	.....	1867	R. C.....	.....	1	1	21	25	46	.....	.....
300	Minneapolis (1313 Fourth Street).....	Eugene D. Holmes, M. A.....	.....	1879	Non-sect.....	5	3	8	108	44	152	30	80
301	Northfield.....	Rev. Th. N. Mohr.....	1874	1875	Lutheran.....	8	1	9	107	32	139	109	26
302	Owatonna.....	J. L. Ingraham, A. M.....	1877	1877	Baptist.....	4	3	7	51	69	120	.....	1
303	St. Peter.....	Rev. M. Wahlstrom, A. M.....	1874	1876	Lutheran.....	16	1	17	189	56	245	.....	121
304	Waseja.....	E. G. Paine, A. M.....	1873	1858	W. Meth.....	2	1	3	25	22	47	29	3
305	Willmar.....	H. S. Hilleboe, A. M.....	1882	1883	Lutheran.....	5	3	8	.....	.....	270	.....	.....
MISSISSIPPI.													
306	Buena Vista.....	J. S. & L. T. Dickey.....	1886	1885	Non-sect.....	3	3	6	200	100	300	225	19
307	Daleville.....	J. M. McBeath, secretary.....	1885	1865	Non-sect.....	5	2	7	85	68	153	128	.....
308	Fayette.....	Miss Kate Wharton.....	1884	1884	Presb.....	0	3	3	12	45	57	.....	.....

309	Handaborough.....	Josiah Hurty, A. M.....	1882	1881	1884	Presb.....	2	3	5	58	40	98	48	13
310	Harpersville.....	C. A. Huddleston, A. M., president.....	1881	1881	1875	Non-sect.....	4	3	7	81	46	127	76	64
311	Jackson.....	T. A. S. Adams.....	1883	1883	1883	Meth.....	3	.....	3	38	9	47	28	.....
312	McComb.....	It. M. Lusher.....	1872	1873	1873	Non-sect.....	1	3	4	73	90	203	.....	0
313	Meridian.....	J. H. Brooks.....	1886	1886	1886	M. E.....	1	2	4	72	90	162	.....	23
314	Ripley.....	J. B. Williams.....	1886	1886	1886	Non-sect.....	1	4	5	80	70	150	80	.....
315	Walthall.....	D. Harmon.....	1887	1887	1887	Non-sect.....	1	2	3	85	80	165	77	24
MISSOURI.														
316	Ashley.....	Walton Seminary.....	1847	1855	1855	.....	1	2	3	41	55	76	44	3
317	Avalon.....	F. A. Z. Kunler, A. B.....	1881	1881	1881	U. B.....	4	4	8	75	60	125	.....	79
318	Brashear.....	S. D. Barry, president.....	1884	1884	1884	Non-sect.....	3	4	7	70	60	130	75	25
319	Brookfield.....	Rev. J. P. Finley, D. D.....	1886	1886	1886	Presb.....	2	2	4	49	43	92	46	28
320	Bunceton.....	Sturte Rogers.....	1873	1873	1873	Presb.....	1	2	3	29	20	43	.....	5
321	Butler.....	P. A. Wagner, Ph. B.....	1877	1877	1877	Presb.....	2	1	3	22	25	80	.....	8
322	Capron.....	Mrs. E. Doerfer.....	1880	1880	1880	Ev. Luth.....	2	3	2	13	125	30	.....	57
323	Capo Girardeau.....	J. F. Lindsey.....	1886	1878	1878	Non-sect.....	2	4	4	138	35	393	178	3
324	Cassville.....	N. L. Madden, A. M.....	1886	1878	1878	Non-sect.....	4	0	4	43	32	75	63	20
325	Chesburg.....	L. E. Wiley.....	1885	1879	1879	Non-sect.....	3	3	4	30	30	70	.....	2
326	Clarksburg.....	J. N. Hooper.....	1885	1879	1879	Non-sect.....	4	4	8	68	32	100	.....	2
327	Clinton.....	E. P. Lankin, A. M.....	1884	1884	1884	Bapt. Mis.....	2	2	2	46	21	67	.....	4
328	Farmington.....	E. J. Jennings.....	1886	1884	1884	Luth.....	2	0	2	80	40	120	.....	.....
329	Gravelton.....	Rev. L. M. Wagner, A. M., president.....	1879	1879	1879	.....	2	1	3	75	70	145	110	.....
330	Henderson.....	J. H. Magill.....	1881	1881	1881	Non-sect.....	2	3	5	156	147	303	167	105
331	Houston.....	C. W. White.....	1884	1884	1884	Non-sect.....	2	3	6	96	90	186	164	.....
332	Humphreys.....	G. A. Smith, A. M., president.....	1884	1884	1884	Non-sect.....	4	4	8	95	109	204	.....	23
333	Kidder.....	G. S. Ramsay, A. M.....	1882	1882	1882	Conq.....	3	4	7	33	25	58	41	6
334	Kirkwood.....	E. A. Inghit.....	1880	1880	1880	Non-sect.....	2	3	5	60	60	140	.....	.....
335	La Belle.....	Rev. H. T. Morton, A. M.....	1881	1881	1881	Non-sect.....	1	4	5	44	48	92	.....	.....
336	Louisiana.....	D. W. Graves, A. M.....	1881	1881	1881	Baptist.....	1	2	3	87	71	158	.....	40
337	Marble Hill.....	T. H. Kendall.....	1872	1872	1872	M. E.....	3	2	5	63	52	115	100	14
338	Marionville.....	Chas. Cornelius.....	1886	1885	1885	Non-sect.....	4	2	6	40	35	75	44	6
339	Novely.....	J. V. Carlin, president.....	1887	1884	1884	Non-sect.....	2	2	4	62	88	150	81	.....
340	Otterville.....	Jas. A. Laming.....	1887	1888	1888	M. E. So.....	3	7	10	32	30	60	.....	.....
341	Palmira.....	Rev. Jas. Nolle.....	1882	1882	1882	R. G.....	1	2	3	60	30	60	.....	.....
342	Palmira.....	Miss Katharine H. Wain- wright.....	1852	1843	1843	P. E.....	2	3	5	15	35	50	18	.....
343	Palmira.....	Rev. John A. McAfee, D. D., president.....	1879	1875	1875	Presb.....	6	4	10	175	120	225	.....	190
344	Parkville.....	W. H. Pritchett, A. M.....	1868	1869	1869	Non-sect.....	5	3	5	40	60	100	75	71
345	Paynesville.....	Chas. Rogers Forster, A. M., president.....	1879	1878	1878	Non-sect.....	3	2	8	80	66	146	96	.....
346	Philo Grove.....	J. W. Ellis, A. M., president.....	1881	1847	1847	Non-sect.....	4	3	7	69	70	139	26	121
347	Plattsburg.....	Rev. Charles W. Latham.....	1852	1852	1852	Presb.....	1	1	2	.....	.....	.....	.....	.....
348	Rensselaer.....	Rev. E. E. McIlhenny, presi- dent.....	1876	1877	1877	Non-sect.....	3	3	6	59	81	134	103	.....
349	Shelbina.....	H. M. Sutton.....	1879	1879	1879	Non-sect.....	2	2	4	43	42	85	.....	.....
350	Spring Carleton.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

* Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.			Students.			
						Male.	Female.	Total.	Male.	Female.	Total.	Number in Academic Grade.
1	2	3	4	5	6	7	8	9	10	11	12	13
												Preparing for College in College or Scientific Course and Classical Course
NEBRASKA.												
351 Beatrice.....	The Blake School.....	Henry N. Blake.....	1880	1881	Presb.....	1	1	2	55	58	113	.....
352 Bellevue.....	Bellevue College.....	— Francis.....	1880	1883	Presb.....	6	3	9	50	30	80	50
353 Franklin.....	Franklin Academy.....	A. C. Hart, A. M.....	1881	1881	Cong.....	4	3	7	74	79	153	65
354 Oakdale (box 70).....	Oakdale Academy.....	Rev. Harvey Wilson.....	1881	1882	Cong.....	1	0	1	15	10	25	0
355 Wahoo.....	Luther Academy.....	S. M. Hill.....	1883	1883	Ev. Luth.....	3	2	5	42	14	56	23
NEW HAMPSHIRE.												
356 Andover.....	Proctor Academy.....	A. L. Hodges, A. B.....	1880	1881	Unitarian.....	2	4	6	28	45	73	15
357 Atkinson.....	Atkinson Academy*.....	F. B. Rice.....	1791	1879	Non-sect.....	1	1	2	27	18	43	.....
358 Candia Village.....	Candia Village High School.....	Albert Edward Colcord.....	1883	1883	Non-sect.....	1	1	2	16	14	30	.....
359 Epping.....	Watson Academy.....	Elmer E. French.....	1883	1883	Non-sect.....	2	2	4	52	54	106	28
360 Franklin.....	Franklin High School.....	W. A. Robinson, A. M.....	1791	1872	Non-sect.....	1	2	3	36	29	65	10
361 Gilmanton.....	Gilmanton Academy.....	S. W. Robinson, A. M.....	1791	1794	Non-sect.....	3	2	5	25	25	50	47
362 Kingston.....	Kingston Academy.....	Charles Burr Towle.....	1840	1840	Non-sect.....	1	1	2	27	24	51	1
363 Lancaster.....	Lancaster Academy.....	D. T. Timberlake.....	1828	1829	Non-sect.....	1	1	2	42	58	100	5
364 New London.....	Colby Academy.....	James P. Dixon, A. M., president.....	1837	1878	Baptist.....	3	4	7	48	56	104	1
365 Northwood Centre.....	Coe's Academy.....	E. L. Hiline.....	1866	1866	Non-sect.....	1	1	2	18	9	27	9
366 Northwood Ridge.....	Northwood Seminary.....	P. H. Hutchins, A. M.....	1867	1867	Pr. Bapt.....	1	1	2	40	23	63	10
367 Pembroke.....	Pembroke Academy.....	Isaac Walker, A. M.....	1818	1819	Cong.....	1	2	3	34	48	82	12
368 Portsmouth.....	Smith's Academy.....	Lewis E. Salth.....	1873	1873	Non-sect.....	3	1	4	38	19	57	16
369 Reed's Ferry.....	McGaw Normal Institute*.....	F. E. Burnette.....	1819	1819	Non-sect.....	1	3	4	54	54	108	2

370	Stratford	Austin Academy	I. Copp	1834	1884	Non-sect.	1	1	2	34	26	60	48	5
371	Warner	Simonds Free High School	Henry S. Roberts, A. M.	1871	1871	Non-sect.	1	2	3	60	40	100	1	1
372	Wolfeborough	Drewster Free Academy	E. H. Lord, A. M.	1887	1887	Non-sect.	2	3	5	28	46	74		
NEW JERSEY.														
373	Beverly	Farnum Preparatory School	James B. Dilke, A. M.	1855	1855	Non-sect.	1	3	4	58	78	126		
374	Blairtown	Blair Presbyterian Academy	J. W. Shumaker, A. M., Ph. D.	1848	1848	Presb.	4	4	8	42	64	165	57	39
375	Cinnaminson	Westfield Friends' School*	Miss Elizabeth White	1801	1800	Friends	2	2	19	23	42			9
376	Crabruy	Brainerd Institute	Edward Wiesse, A. M., president	1863	1863	Non-sect.	2	1	3			73	8	
377	Hackettstown	Centenary Collegiate Institute	Rev. Geo. H. Whitney, D. D.	1866	1871	M. E.	8	6	14	121	111	232		139
378	Hightstown	Peddie Institute	Rev. John Greene, Ph. D.	1865	1869	Baptist	5	9	14			220		8
379	Hoboken	Hoboken Academy	Jos. Schrenk	1861	1861	Baptist	13	5	18			420	106	4
380	Jersey City (109 Grand St.)	Hasbrouck Institute	Chas. C. Simmes, A. M.	1856	1856	Baptist	12	8	20	178	124	302	217	90
381	Keyport	Keyport Academy*	George W. Holmes	1857	1857	Non-sect.	1	1	2	49	27	76		2
382	Matawan	Glenwood Institute	J. Calvin Rice, A. M.	1855	1855	Friends	3	4	7	51	45	96	73	2
383	Moorestown	Moorestown Academy	Walker L. Moore	1878	1878	Friends	2	2	4	42	39	81	34	
384	Newark (19 Green Street)	Green Street German-American School	H. von der Heide	1856	1856	Non-sect.	3	7	10	160	130	290		40
385	Newton	Newton Collegiate Institute	Joel Wilson, A. M.	1850	1852	Non-sect.	2	3	5	52	21	73	61	15
386	Orange (Main Street)	Dearborn-Morgan School	Dearborn-Morgan & Co.	1876	1876	Non-sect.	3	14	17	86	124	210	74	7
387	Patterson (Van Houten and Auburn Streets)	Patterson Seminary	A. B. Wiggitt, A. M.	1864	1864	Non-sect.	2	2	4	27	27	54	20	
388	Pennington	Pennington Institute*	Thomas Hanlon, A. M., D. D.	1889	1840	Meth.	7	7	14	178	82	260		
389	South Orange	South Orange Academy	Miss Isabella S. Brown	1872	1873	Non-sect.	5	5	5	22	38	60		
390	Woodbury	Deptford School	Curtis J. Lewis	1873	1873	Friends	1	3	4	36	15	51	42	
NEW MEXICO.														
391	Albuquerque	Albuquerque Academy	C. E. Hoelgen	1879	1879	Cong.	1	4	5	100	100	200	20	
392	Las Vegas	Las Vegas Academy	W. H. Ashley, A. M., M. D.	1880	1880	Cong.	2	4	6	70	79	149	22	
393	Santa Fe	Presbyterian Academy	C. E. Lyon	1881	1881	Presb.	2	2	2	13	15	33		3
394	Santa Fe	Santa Fe Academy*	Miss Clara E. Lyon			Presb.	2	2	2	15	15	30		
395	Silver City	Academy of Our Lady of Lourdes*	Sisters of Mercy	1884	1884	R. C.	5	5	5	30	70	100		
396	Tiptonville	La Junta Institute	H. Frampton	1870	1870	M. E.	1	1	1	14	10	24		3
NEW YORK.														
397	Adams	Adams Collegiate Institute*	O. B. Rhodes	1855	1864	Non-sect.	3	4	7	72	94	166		8
398	Anenita	Anenita Seminary	T. N. Glover	1855	1856	Non-sect.	2	3	5	23	13	38	27	
399	Antwerp	Ives Seminary*	J. D. Slay	1856	1856	M. E.	2	5	8	70	61	131		32
400	Argyle	Argyle Academy	L. S. Packard	1841	1841	Non-sect.	1	2	2	56	50	106	4	
401	Bainbridge	Bainbridge Academy	Fred. J. Turnbull	1874	1874	Non-sect.	1	1	2	22	39	61		9
402	Bedford	Bedford Academy	F. S. Smith	1869	1869	Non-sect.	20	21	41	23	13	36		13
403	Brooklyn (Lafayette St.)	Adelphia Academy	Albert C. Perkins, A. M., Ph. D.	1869	1869	Non-sect.	20	21	41	419	451	870	714	9
404	Brooklyn (133 Schermerhorn Street)	Chenevière Institute*	Rev. W. A. and Madame J. M. Stamm	1865	1865	Non-sect.	2	9	11	70	70	140		2
405	Cazenovia	Cazenovia Seminary	Rev. Isaac N. Clements, A. M.	1824	1824	M. E.	7	2	9	175	129	304	261	27
406	Cherry Valley	Cherry Valley Academy	A. McMaster	1881	1881	Presb.	2	2	4	21	27	48	33	10

*Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.			Students.				Preparing for College or Scientific Course in College or School.
						Male.	Female.	Total.	Male.	Female.	Total.	Number in Academic Grade.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
NEW YORK—continued.													
407 Cincinnati.....	Cincinnati Academy.....	F. M. Wilson, M. A.....	1857	1857	Non-sect..	2	1	3	41	39	80	62	16
408 Clarence.....	Parker Union School.....	E. A. Parks.....	1860	1869	Non-sect..	1	3	4	73	93	166	38	1
409 Claverack.....	Claverack College and Hudson River Institute.....	Rev. Arthur H. Flack, A. B., President.....	.....	1854	Meth.....	8	9	17	93	86	179	.....	.....
410 College Point.....	Poppenhusen Institute.....	F. Martens, secretary.....	1868	1870	Non-sect..	3	3	6	135	34	169	.....	.....
411 Dundee.....	Dundee Preparatory School.....	John Kling, A. M.....	1882	1879	Non-sect..	2	4	6	111	107	218	112	5
412 Easton.....	Marshall Seminary.....	John Rod S. Pratt.....	1851	1843	Friends	1	1	2	24	28	52	16	2
413 Eddytown.....	Starkey Seminary.....	C. R. Hammond, Ph. D.....	1848	1842	Christian.	6	12	17	107	70	177	88	15
414 Elbridge.....	Munro Collegiate Institute.....	T. K. Wright, Ph. D.....	1839	1839	Non-sect..	2	3	5	51	41	92	76	5
415 Fairfield.....	Fairfield Seminary.....	D. D. Wane.....	1863	1862	Non-sect..	4	6	10	101	91	192	57	36
416 Flatbush.....	Mt. Beacon Academy.....	J. Fred Smith, A. M.....	1895	1883	Non-sect..	2	5	7	54	39	93	23	16
417 Flatbush.....	Erasmus Hall Academy.....	Rev. R. G. Strong.....	1797	1787	Non-sect..	3	6	9	48	24	72	23	10
418 Florida.....	S. S. Seward Institute.....	Mrs. M. S. Parks.....	1846	1843	Non-sect..	2	2	4	7	15	22	10	2
419 Fort Edward.....	Fort Edward Collegiate Institute*.....	Jos. E. King, D. D., Ph. D.....	1851	1851	Non-sect..	6	7	13	140	90	230	30	30
420 Fort Plain.....	Clinton Liberal Institute.....	C. V. Parsell.....	1831	1831	Univ.....	6	10	16	96	127	223	196	31
421 Franklin.....	Delaware Literary Institute.....	Chas. H. Verrill, A. M., Ph. D.....	1834	1833	Non-sect..	4	3	7	107	63	170	157	24
422 Glens Falls.....	Glens Falls Academy*.....	Daniel C. Farr, A. M.....	1835	1835	Non-sect..	3	8	11	85	114	199	111	56
423 Gowanda.....	Gowanda Academy.....	J. H. Selden, A. M.....	.....	1841	Non-sect..	1	6	7	165	185	350	.....	14
424 Greenville.....	Greenville Academy*.....	Johnson Childs.....	1816	1816	Non-sect..	7	2	9	3	24	45	.....	11
425 Greenwich.....	Greenwich Union School.....	C. L. Morey.....	1803	1898	Non-sect..	1	2	3	60	71	130	.....	32
426 Hartwick Seminary.....	Hartwick Seminary.....	Rev. James Pitcher, A. M.....	1816	1815	Luth.....	3	8	11	90	55	145	67	.....
427 Havana.....	Cook Academy.....	A. C. Hill, Ph. D.....	1873	1873	Non-sect..	5	4	9	90	87	177	.....	41
428 Hudson.....	Hudson Academy*.....	J. W. Thomas, A. M.....	1807	1807	Non-sect..	2	2	4	34	42	76	.....	8

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.		Students.				Number in Academic Grade.	Preparing for College in College or Scientific School.
						Male.	Female.	Male.	Female.	Total.	Total.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
NORTH CAROLINA—cont'd.													
470	Bayborough.....	Pamlico Male and Female Institute.											
471	Belvidere	Belvidere Academy	Geo. T. Farnell, L. I.	1887	Friends ..	1	1	2	17	31	48		2
472	Burlington	Holt's School	Elizabeth A. and Mary J. White ..	1835	Friends ..		2	2	24	23	47		
473	Burnsville	Holt's School	Rev. Jeremiah W. Holt.....	1881	Christian ..	1	1	2	42	18	60	42	
474	Cedar Grove.....	Burnsville High School *	Rev. J. Britt.....	1843	Non-sect ..	2			15	31	87		
475	Chocowinity.....	Cedar Grove Academy	B. C. Patton	1881	Non-sect ..	1	1	2	40	32	72	38	5
476	Conover	Trinity School.....	Rev. N. C. Hughes, A. M., D. D.	1876	P. E.	4	2	6	90	52	142	72	60
477	Dallas	Concordia College.....	Rev. R. A. Yoder	1881	Lutheran ..	4	2	6	90	103	193	102	51
478	Elizabeth City	Gascon College	M. L. Little, A. M.	1884	Non-sect ..	2	3	5	66	60	126	108	
479	Ellerbe Springs	Ellerbe Springs Academy *	S. L. Sheep	1878	Non-sect ..	1	2	3	58	103	34		5
480	Enochville	Enochville High School	Thomas C. Brooks, Ph. B.	1875	Non-sect ..	1	1	2	20	18	38		21
481	Fairfield	Fairfield Academy	F. B. Brown, A. M.	1876	Non-sect ..	1	1	2	42	33	75		13
482	Fork Church	Fork Academy	Wm. H. Carroll, A. M., B. F.	1879	Baptist ..	2	1	3	120	118	238		3
483	Franklin	Literary and Theological School ..	J. T. Alderman	1880	Christian ..	1	4	5	62	64	116	72	22
484	Fremont	Fremont Academy	Rev. George Young	1888	Non-sect ..	1	1	2	3	46	28	74	54
485	Germantown	Germantown Institute	W. B. Harris	1856	Non-sect ..	2	1	3	67	38	105		15
486	Graham	Graham College	Rev. W. S. Long, A. M., president ..	1887	Non-sect ..	5	2	7	70	60	130	70	12
487	Greensborough	Bennett Seminary	Rev. W. F. Steele, A. M.	1873	M. E.	3	2	5	65	71	136	96	9
488	Greenville	Male and Female Institute.....	John Duckett.....	1885	Non-sect ..	2	4	6	15	40	55	24	
489	Hickory	Claremont College	A. C. Hottenstein, A. E.	1882	Non-sect ..	1	2	3					

430	High Point.....	Classical Institute.....	Rev. C. Landis.....	1882	Non-sect.....	2	2	4	50	59	119	39
431	Holly Springs.....	Holly Springs Institute*.....	Rev. J. M. White, A. M.....	1889	Non-sect.....	2	2	4	38	37	75	51
432	Hookerton.....	Collegiate Institute.....	Willow E. Ormond.....	1885	Non-sect.....	1	1	4	47	26	73	51
433	Huntersville.....	Huntersville High School*.....	Rev. W. W. Orr, A. M.....	1885	Non-sect.....	3	3	6	92	71	163	11
434	Kinston.....	Kinston College.....	Richard H. Lewis, A. M., M. D.....	1882	Non-sect.....	3	3	6	74	61	128	19
435	Leasburg.....	Southern Institute*.....	Rev. Solomon Lee.....	1880	M. E. So.....	1	2	3	25	20	45	6
436	Leicester.....	Town Seminary.....	J. F. Kelson, A. M.....	1887	Meth.....	1	1	2	67	33	100	1
437	Mooreville.....	Mooreville Academy.....	J. K. Hall.....	1877	Baptist.....	1	2	3	21	31	132	8
438	Moravian Falls.....	Moravian Falls Academy.....	G. W. Greene.....	1877	Baptist.....	1	1	2	101	51	132	66
439	Morton's Store.....	Gillman's Academy.....	L. T. Gillman.....	1879	Non-sect.....	2	1	3	17	5	22	13
440	Mt. Vernon Springs.....	Mt. Vernon Springs Academy.....	A. A. and M. H. Holt.....	1880	Non-sect.....	5	2	7	40	45	85	14
441	Oak Ridge.....	Oak Ridge Institute.....	J. H. Hummel, A. M.....	1878	Non-sect.....	1	1	2	191	27	218	30
442	Panico.....	Male and Female Academy.....	J. H. Moore.....	1883	Friends.....	1	1	2	14	13	27	17
443	Palmyra.....	Nahant Academy.....	C. Alphonso Smith.....	1878	Non-sect.....	1	1	2	52	44	96	2
444	Selma.....	Barnes School.....	W. S. Barnes.....	1886	Non-sect.....	1	1	2	16	21	37	7
445	Stantonsburg.....	Summerfield High School.....	F. S. Blair.....	1872	Non-sect.....	1	2	3	24	24	43	0
446	Troy.....	Troy High School*.....	B. G. Marsh, A. M.....	1885	M. E. So.....	1	2	3	49	45	94	50
447	Warsaw.....	Warsaw Institute*.....	C. H. Spencer.....	1880	Baptist.....	1	2	3	42	29	71	17
448	Woodland.....	Grange High School.....	N. W. Britton.....	1877	Baptist.....	1	1	2	22	21	43	6
449	Yadkin College.....	Yadkin College High School.....	A. B. Morgan.....	1886	M. P.....	3	1	4	55	28	83	53
450	Ohio.											
511	Ausuburg.....	Grand River Institute.....	Rev. R. G. McGlelland.....	1882	Friends.....	3	4	7	63	74	137	37
512	Barnesville.....	Friends' Boarding School.....	J. Hervey Dewees.....	1876	Non-sect.....	2	2	4	36	45	81	2
513	Chester.....	Chester Academy.....	E. C. Hecox.....	1842	Non-sect.....	1	1	2	54	66	120	6
514	Clermontville.....	Clermont Academy*.....	James K. Parker.....	1859	Baptist.....	2	1	3	19	10	29	2
515	Evlington.....	Evlington Academy.....	F. F. Vile, A. M.....	1857	Non-sect.....	1	1	2	39	28	67	61
516	Fultonham.....	Fultonham Academy.....	H. K. Gehlbart, A. M.....	1880	Non-sect.....	1	1	2	22	18	40	24
517	Gallipolis.....	Gallia Academy.....	A. B. Dunlap.....	1811	Non-sect.....	1	2	3	45	36	81	56
518	Green Spring.....	Green Spring Academy.....	Paul R. Lauer, A. B.....	1882	Non-sect.....	3	2	5	30	33	68	38
519	Harlan Springs.....	Harlan Springs College.....	John R. Steeves, A. M.....	1867	Non-sect.....	3	3	6	57	57	114	51
520	Hudson.....	Western Reserve Academy.....	Newton B. Hobart, A. M.....	1882	Non-sect.....	3	1	4	52	26	78	10
521	New Harpstown.....	New Harpstown Academy.....	J. Howard Brown.....	1837	Non-sect.....	2	1	3	26	6	32	3
522	Perryville.....	Green Town Academy.....	J. C. Sample, A. M.....	1865	Non-sect.....	2	2	4	60	40	100	29
523	Poland.....	Poland Union Seminary.....	S. A. Kirkbride, A. B.....	1860	Presb.....	2	1	3	25	11	26	11
524	Savannah.....	Savannah Academy.....	W. F. Findley, A. B.....	1859	Non-sect.....	4	2	7	80	70	150	6
525	South New Lyme.....	New Lyme Institute.....	J. Tuckerman, A. M., Ph. D.....	1882	Presb.....	1	1	2	143	132	280	39
526	South Salem.....	Salem Academy.....	W. W. Findley, A. B.....	1842	Non-sect.....	7	7	14	22	21	43	58
527	Springfield.....	Springfield Seminary*.....	Mrs. Ruth A. Worthington.....	1874	Non-sect.....	1	1	2	16	64	80	6
528	Trupper's Plains.....	Plains Seminary.....	Abma Hoffman.....	1860	Non-sect.....	3	3	6	31	30	81	29
529	Westerville.....	Otterbein Institute.....	W. J. Zuck.....	1817	U. B. C.....	1	2	3	63	32	95	72
530	Oregon.											
531	Dallas.....	La Creole Academic Institute.....	Thomas O. Bell, A. M.....	1856	Non-sect.....	2	2	4	32	46	78	58
532	Drain.....	Drain Academy.....	R. A. Booth.....	1880	M. E.....	2	2	4	97	93	190	75
533	Gervais.....	St. Scholastica's Convent School.....	Mother Mary Bernardine.....	1883	R. C.....	6	1	7	31	48	79	9
534	Grande Ronde.....	Grande Ronde School.....	Rosa Hatch.....	1868	Non-sect.....	1	1	2	34	34	77	7
535	Portland.....	Independent German School.....	Fredericke Becher.....	1889	Non-sect.....	1	1	2	6	6	12	0
536	Newberg.....	Friends' Pacific Academy.....	H. J. Minthorn, M. D., supt.....	1885	Friends.....	1	2	3	1	47	94	18
537	The Dalles.....	Wasco Independent Academy.....	R. H. Willis, A. M.....	1880	Non-sect.....	2	5	7	80	151	79	17

* Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.				Students.			
						Male.	Female.	Total.	Religious.	Male.	Female.	Total.	Number in Academic Grade.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
PENNSYLVANIA.													
537 Brookville	Longview School.....	Rev. John G. Mulholland, LL.D.		1882	P. E.	1	1	2	7	6	13		2
538 Chester	Chester Academy.....	George Gilbert.....		1862	Non-sect..	2	6	8	57	45	102	43	2
539 Concordville.....	Maplewood Institute.....	Joseph Shortridge, A. M.	1870	1862	Friends ..	3	5	8	40	10	50	36	4
540 Doylestown.....	Doylestown Seminary* ..	John Gosman, Ph. D.		1869	Non-sect..	4	5	9	65	56	121		
541 Easton	Home Boarding School* ..	Mrs. M. M. Disbrow ..		1878		2	2	2			15		
542 Erie	Erie Academy	Alaric Stone, A. M.	1817	1823	Non-sect..	1	2	3	49	60	109	44	0
543 Factoryville	Keystone Academy* ..	John H. Harris, Ph. D.	1868	1869	Baptist ...	5	3	8	122	83	205		
544 Jerkintown	Abington Friends' School ..	Arthur H. Tomlinson ..		1873	Friends ...	1	4	5	37	50	87	16	
545 Kennett Square	Martin Academy	Louis B. Appleby		1873	Friends ...	15	5	20	48	47	95	65	
546 Kingston	Wyoming Seminary	Rev. I. L. Sprague, A. M., D. D.	1844	1844	Meth.	0	1	1	520	312	832	763	
547 Lahaska	Buckingham Friends' School ..	Helo Vanant		1790	Friends ...	4	4	4	51	21	42		3
548 Langhorne	Langhorne Friends' School ..	Cassandus H. Rice.....		1790	Friends ...	1	1	2	41	48	89	71	10
549 McLevy's Fort	Stone Valley Academy.....	H. D. Gordon, A. B.....	1884	1862	Non-sect..	4	4	4	51	36	70		
550 McDonald	Alvendale Academy.....	Rev. W. D. Irons		1877	U. P.	1	1	2	49	50	99	84	20
551 Mercersdale	Alvendale Preparatory School..	John D. Meese, Ph. B.		1884	Non-sect..	3	1	3	80	43	123	76	15
552 Millfstown	Millfin Academy	R. F. Elliott		1882	Non-sect..	2	1	3	20	15	35	34	7
553 Mount Pleasant.....	Western Pennsylvania Classical and Scientific Institute.	Rev. Leroy Stephens, A. M.	1871	1873	Baptist ...	3	7	10	81	89	170	98	3
554 Murrysville	Laird Institute	Rev. Thomas J. Porter, A. B.		1862	Non-sect..	3	3	3	30	20	50		13
555 Myersstown	Faloutate College*	Rev. William C. Schaeffer, A. M.	1868	1868	Returned	6	3	9			137		
556 New Bloomfield	New Bloomfield Academy	J. M. Arnold, A. B.....		1839	Non-sect..	3	1	4	41	29	70	53	5

557	New Lebanon.....	McElwain Institute.....	W. E. Canon.....	1883	1881	Non-sect ..	2	1	3	62	69	131	59	.....	3
558	North Hope.....	North Washington Academy.....	David L. Terwilliger, A. B.,	.....	1879	Non-sect ..	1	.....	.....	21	20	41	.....	.....	.....
559	North Wales (box 725).....	Academy and School of Business ..	S. U. Brunner.....	.....	1871	Non-sect ..	6	0	5	38	9	47	39	.....	18
560	Oxford.....	Oxford Academy.....	Miss Anna F. Webb.....	.....	1878	Non-sect ..	2	3	5	35	26	61	49	.....	10
561	Parkersburg.....	Parkersburg Academy.....	J. Q. Griffith, M. D.....	.....	1877	Non-sect ..	1	.....	.....	14	22	36	.....	.....	1
562	Pennsboro.....	Pennsboro Seminary.....	Jas. H. Griffith, M. D.....	.....	1875	Non-sect ..	1	3	4	38	19	37	35	.....	7
563	Philadelphia (15th and Race Streets).....	Friends' Central High School.....	George L. Maris, A. M.....	.....	1845	Friends ..	10	28	33	223	357	590	.....	.....	21
564	Philadelphia (140 North 16th Street).....	Friends' Select School for Boys and Girls.....	John H. Dillingham.....	.....	1833	Friends ..	2	8	10	72	71	143	71	.....	2
565	Philadelphia (1539 Chest- nut Street).....	College Preparatory School.....	Alonzo Brosen.....	.....	1877	Non-sect ..	3	2	5	37	3	40	27	.....	28
566	Philadelphia (921 Bain- bridge Street).....	Institute for Colored Youth.....	Fanny Jackson Coppin.....	1842	1837	Friends ..	3	5	8	202	225	427	225	.....	.....
567	Pleasant Mount.....	Pleasant Mount Academy.....	William Miller, M. D.....	1881	1869	Non-sect ..	2	3	5	33	57	90	27	.....	0
568	Port Royal.....	Airy View Academy.....	J. Grier Long, A. B.....	.....	1852	Non-sect ..	1	.....	.....	19	22	41	31	.....	11
569	Rimersburg.....	Clarion Collegiate Institute.....	Rev. W. Wilberforce Den- triek, A. M.....	1859	1858	Reformed ..	5	1	6	46	41	87	61	.....	12
570	Scranton.....	School of the Laekawanna.....	Rev. Thomas M. Cann, A. M.....	.....	1872	Presb.....	4	4	8	86	67	153	123	.....	31
571	Schmiegrove.....	Classical Department of Mission- ary Institute.....	J. R. Dimm, A. M., D. D.....	1858	1853	Lutheran.....	3	1	4	72	15	87	.....	.....	.....
572	Shenleyville.....	Shenleyville Normal Academy.....	M. R. Smith.....	.....	1876	Non-sect ..	1	2	3	46	64	110	.....	.....	.....
573	Stewartstown.....	English and Classical Academy.....	John B. Bahn, A. M.....	1855	1856	Non-sect ..	1	1	2	44	38	82	.....	.....	14
574	Waterford.....	Waterford Academy.....	W. C. Gorman, A. M.....	1811	1822	Non-sect ..	2	3	5	40	50	90	.....	.....	.....
575	Westtown.....	Westtown Boarding School.....	J. G. Williams, supt.....	.....	1799	Friends ..	8	6	14	124	105	229	.....	.....	.....
576	Williamsport.....	Williamsport-Dickinson Sem i- nary.....	Rev. Edward J. Gray, D. D., president.....	1843	1848	M. B.....	7	8	15	132	122	234	222	.....	17
577	York.....	York Collegiate Institute.....	James McDougall.....	1873	1873	Presb.....	5	4	9	60	36	96	36	.....	10
RHODE ISLAND.															
578	Newport.....	Rogers High School.....	F. W. Tilton, A. M., head- master.....	.....	1873	Non-sect ..	4	4	8	58	71	129	.....	.....	27
579	Newport (30 High Street)...	School of Languages and Art.....	L. Fennebresque.....	1887	1887	Non-sect ..	4	3	7	8	21	29	.....	.....	0
580	Providence.....	Friends' New England Boarding School.....	Augustine Jones.....	1823	1784	Friends ..	9	7	16	116	50	206	136	.....	.....
SOUTH CAROLINA.															
581	Charleston.....	Wallingford Academy.....	Rev. T. A. Grove.....	1872	1868	Presb.....	3	4	7	315	355	670	48	.....	51
582	Clinton.....	Clinton Presbyterian College *.....	Rev. Robert P. Smith, A. M., president.....	1882	1872	Presb.....	3	3	6	54	40	94	.....	.....	25
583	Fortmore.....	Penn School *.....	Misses Towne and Murray.....	.....	1862	Non-sect ..	1	8	9	115	120	235	.....	.....	0
584	Grove.....	Grove School.....	T. L. Young.....	.....	1880	Non-sect ..	1	0	1	22	24	46	.....	.....	0
585	Orangeburg.....	Sheridan Classical School.....	Hugo G. Sheridan.....	.....	1873	Non-sect ..	3	1	4	76	45	121	107	.....	67
TENNESSEE.															
586	Alexandria.....	Masonic Normal School *.....	H. L. W. Gross.....	.....	.....	Non-sect ..	2	2	4	80	60	140	.....	.....	.....
587	Benton.....	Okeech High School.....	D. F. Smith.....	.....	.....	Non-sect ..	1	1	2	59	51	110	4	.....	.....
588	Bloomington.....	Kingsley Seminary.....	Joseph H. Ketron, A. M.....	.....	1877	M. E.....	4	1	5	101	63	164	83	.....	36

* Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.			Students.				Preparing for College or Scientific Course and in College or Scientific School.
						Male.	Female.	Total.	Male.	Female.	Total.	Number in Academic Grade.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
TENNESSEE—continued.													
589 Chatata.....	Chatata High School.....	M. R. M. Burke.....	1886	1872	Non-sect..	2	1	3	80	60	140	90	.....
590 Church Hill.....	Church Hill High School.....	Jas. K. Wolfe.....	.....	1877	Non-sect..	2	0	2	75	40	115	48	30
591 Clifton.....	Clifton Masonic Academy.....	B. F. Davis.....	.....	.....	Non-sect..	1	3	4	70	67	137	46	16
592 Cog Hill.....	Cog Hill Collegiate Institute.....	H. F. Kinser.....	.....	1881	Non-sect..	1	2	3	115	70	185	167	.....
593 Dandridge.....	Maury Academy.....	J. T. Henderson.....	1800	1890	Non-sect..	1	1	2	30	35	65	.....	.....
594 Evansville.....	Tennessee Valley College.....	W. J. Moore.....	1881	1886	Non-sect..	1	2	3	59	47	106	40	.....
595 Friendsville.....	Friendsville Academy.....	Z. H. Dixon.....	1881	1871	Friends ..	1	1	2	56	64	120	39	1
596 Gardner.....	Gardner Academy.....	D. W. Tracy.....	1884	1882	Presb.....	1	1	2	55	60	115	5	8
597 Grassy Cove.....	Grassy Cove Academy.....	Rev. J. Sisby, A. M.....	1884	1882	Presb.....	1	2	3	40	38	78	8	.....
598 Hartsville.....	Hartsville Masonic Institute.....	S. A. Mynders, A. B., president.	1856	1857	.....	2	5	7	76	89	165	72	.....
599 Johnson City.....	Fairview Private School	L. A. Calvin.....	1887	.....	.....	1	1	2	90	70	160	.....	8
600 Kimbrough's Store.....	Chilhowee Institute *.....	Jas. L. Truett.....	1884	.....	.....	2	1	3	65	71	136	.....	.....
601 Knoxville.....	Knoxville College.....	Rev. J. S. McCulloch, D. D., president.	.....	1875	U. P.....	3	9	12	127	118	245	72	.....
602 Loudon.....	Loudon High School *.....	George W. Fox, A. B.....	1869	1870	Cumb. P ..	1	2	3	36	39	75	.....	44
603 Manchester.....	Manchester College.....	Allen D. Carden.....	1853	1865	Non-sect..	1	3	4	50	50	100	70	.....
604 Mohawk.....	Mohawk Seminary.....	T. N. Haun.....	1887	1887	Non-sect..	1	1	2	80	60	140	.....	.....
605 Parrottsville.....	Parrottsville High School	J. W. Lucas, M. A.....	1885	1882	Non-sect..	1	2	3	79	37	116	29	14
606 Pikeville.....	People's College *.....	J. M. Scott, M. A.....	1872	1872	M. E. So ..	3	1	4	62	34	96	.....	39
607 Santa Fe.....	Santa Fe Institute.....	J. W. Patton, A. B.....	1858	1858	Non-sect..	3	3	6	84	83	167	119	43
608 Savannah.....	Hardin College *.....	H. J. Cox and W. H. Weadin.	1870	1870	Non-sect..	2	3	5	60	65	125	.....	.....
609 Sequachie College.....	Sequachie College.....	J. L. Honnold, president.....	1870	1861	Non-sect..	2	2	4	69	74	143	.....	.....

610	Troy	Obion Normal College	Fred. J. Pure, v. l., president	1874	1874	Non-sect.,	1	4	5	129	61	201	81	.....	93
611	Washington College	Washington College	Rev. J. W. C. Willoughby,	1795	1794	Presb.,	3	0	3	76	72	118	.....	3	67
612	White Pine	Edwards Academy	W. W. C. Gardner, m. s.	1879	1884	U. l.,	2	2	4	50	62	112	96	.....	.....
613	Woodbury	Woodbury College	A. Spahn	1852	1852	Non-sect.,	2	2	4	73	78	151	79	.....	.....
TEXAS.															
614	Austin	German-English St. Martin's School	Otto G. Neumann	1837	1887	Ev. Luth.,	2	1	3	32	24	56	22	.....	19
615	Buffalo Gap	Buffalo Gap College	J. M. Wagstaff, A. M.	1886	1882	C. Presb.,	2	4	6	70	82	152	117	.....	50
616	Crockett	Crockett Academy	G. J. Nunn	.....	1857	Non-sect.,	1	4	5	90	85	175	85	.....	.....
617	Gonzales	Gonzales Male and Female College	H. M. Ivy, u. s. d.	.....	1855	Non-sect.,	2	5	7	125	165	230	105	.....	.....
618	Hearne (box 21)	Hearne Academy	William F. Smith	1883	1881	Baptist	2	3	5	49	37	86	27	.....	.....
619	Marshall	Bishop College	S. W. Cutver, A. M., president	1885	1881	Baptist	5	3	8	86	67	153	140	.....	17
620	Marshall	Wiley University	Rev. Geo. Whitaker, A. M., president	1882	1873	M. E.	6	2	8	109	91	200	48	.....	37
621	Rhea's Mill	Rhea's Mill Academy	J. W. Miller, A. B.	.....	1882	Non-sect.,	1	2	3	38	32	70	30	.....	8
622	San Antonio	German-English School*	William Barbeck	1860	1853	Non-sect.,	2	2	4	90	72	162	.....	.....	.....
623	San Marcos	Coronet Institute	W. J. Spillman, A. M., president	1879	1869	M. E. So.,	2	5	7	.....	.....	210	158	.....	.....
624	San Saba	San Saba College*	George H. Hagun	1885	1882	M. E. So.,	1	2	3	.....	.....	.....	.....	.....	3
625	Sulphur Springs	Central College	Rev. J. W. Adkisson, A. M.	1884	1876	Meth.	5	4	9	153	177	330	194	.....	158
626	Walnut	Central College	Elliot and Davis	.....	1885	Non-sect.,	2	3	5	111	112	223	149	.....	.....
627	Willis	Male and Female College	Rev. S. N. Barker, president	1888	1885	Non-sect.,	2	5	7	110	120	230	115	.....	13
UTAH.															
628	American Fork	Willard Academy*	Miss Clara Pierce	.....	1879	Presb.	.....	.....	.....	47	37	84	.....	.....	.....
629	Logan	Brigham Young College*	James Z. Stewart, president	.....	1878	L. D. S.	3	2	5	170	90	260	.....	.....	.....
630	Mt. Pleasant	Wasatch Academy*	N. J. Geyer	.....	1875	Presb.	1	2	3	25	50	75	.....	.....	13
631	Ogden	Ogden Academy	H. W. Iting	.....	1883	Cong.	1	3	4	.....	.....	104	91	.....	.....
632	Ogden	School of the Good Shepherd	Arthur C. Newell	.....	1877	P. E.	1	3	3	31	72	163	41	.....	.....
633	Park City	Park Academy	P. E. Merrill	1881	1882	Cong.	1	1	2	40	40	80	.....	.....	.....
634	Provo	Proctor Academy	Mary P. French	.....	1883	Cong.	0	3	3	93	73	171	.....	.....	.....
635	Salt Lake City	St. Mark's School	Rev. Abel Leonard	.....	1867	P. E.	1	8	9	219	204	423	31	.....	.....
636	Salt Lake City	Salt Lake Collegiate Institute	J. F. Millsbaugh, v. A., m. d.	1875	1875	Presb.	4	5	9	146	173	319	38	.....	11
637	Salt Lake City	Salt Lake Seminary	Rev. W. A. Hunter	1871	1870	M. E.	2	6	8	.....	.....	189	9	.....	.....
VERMONT.															
638	Bakersfield	Brigham Academy	F. E. Parlin	.....	1879	Non-sect.,	1	3	4	55	68	123	95	.....	4
639	Barre	Goddard Seminary	D. L. Mausley, A. B.	1863	1870	Univ.	5	5	10	111	79	190	152	.....	9
640	Derby	Derby Academy	I. O. Palmer, A. B.	1839	1839	Univ.	1	2	3	55	65	120	106	.....	6
641	Fairfax	New Hampton Institution*	J. N. Eno, A. M.	1824	1825	Baptist	1	1	1	19	9	28	.....	.....	.....
642	Hyde Park	Lamelle Central Academy	.....	.....	1857	Non-sect.,	1	2	3	150	80	200	165	.....	9
643	Lyndon Centre	Lyndon Institute	Walter E. Ranger, A. M.	1867	1870	Non-sect.,	5	4	9	113	90	203	183	.....	18

*Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART I—Continued.

Location.	Name.	Principal.	Date of Charter.	Date of Opening.	Religious Denomination.	Instructors.			Students.				Preparing for College Classical Course and for Scientific or Scien- tific School.
						Male.	Female.	Total.	Male.	Female.	Total.	Number in Academic Grade.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
VERMONT—continued.													
644 Manchester.....	Burr and Burton Seminary.....	M. L. Severance, A. M.....	1829	1883	Cong.....	2	3	5	40	50	90	82	11
645 Peacham.....	Caledonia County Grammar School.....	C. A. Bunker, A. M.....	1795	1797	Cong.....	1	3	4	69	63	132		
646 Poulinsey.....	Troy Conference Academy.....	Rev. Chas. H. Dunton, D. D.....	1834	1886	M. E.....	7	4	11	120	75	195	159	52
647 St. Johnsbury.....	St. Johnsbury Academy.....	Charles E. Putney, Ph. D.....	1844	1844	Non-sect.....	7	5	12	158	165	323		15
648 Saxton's River.....	Vermont Academy.....	H. M. Willard, A. M.....	1872	1876	Baptist.....	5	6	11	102	91	193	178	139
649 South Woodstock.....	Green Mountain Perkins Acad- emy.....	F. O. Kendall, A. M.....	1848	1848	Univ.....	3	2	5	18	15	33		2
650 Thetford.....	Thetford Academy*.....	W. H. Cummings, A. M.....	1819	1819	Cong.....	1	5	6	40	50	90		30
651 Underhill.....	Bell Institute*.....	J. C. Robinson.....	1852	1852	Non-sect.....	1	1	2	70	58	128	105	2
652 Waterbury Centre.....	Green Mountain Seminary.....	Elizabeth Colley, A. M.....	1862	1869	Free Bap.....	3	5	8					8
VIRGINIA.													
653 Abbeville.....	Bluestone Mission School.....	Rev. J. A. Ramsay, superin- tendent.....		1880	U. P.....	1	2	3	105	115	220		
654 Brentsville.....	Brentsville Seminary.....	Ezra Bauder.....		1879	Non-sect.....	1		1	9	9	18	10	
655 Dayton.....	Shenandoah Institute.....	Rev. Geo. P. Hoff, A. M.....	1884	1877	U. B.....	6	0	6	40	44	84	79	
656 Herndon.....	Herndon Seminary.....	Mrs. M. M. Castleman.....		1876	Non-sect.....	3	3	6	3	17	20	1	
657 Langfield.....	Curry College.....	Wm. T. Kennedy.....		1882	Baptist.....	2	1	3	90	83	173	68	12
658 Suffolk.....	Suffolk Collegiate Institute*.....	P. J. Kernodle, A. M.....	1872	1872	Christian.....	2	3	5	34	24	58		14

WASHINGTON TERRITORY.											
6559	Cheney	Benj. P. Cheney Academy	M. M. Carragher	1882	Non-sect.....	1	1	2	30	60	40
6560	Coxfax	Coxfax College	E. T. Trimble, A. M.	1885	Baptist.....	4	5	9	61	121	11
6561	Coupsville	Puget Sound Academy	Geo. Lindsay	1886	Presb.....	2	3	4	30	39	69
6562	Ellensburg	Ellensburg Academy *	Rev. H. G. Denison, A. M.	1884	Presb.....	2	1	3	33	28	61
6563	Huntsville	Washington Seminary	W. S. Walker	1880	U. B.....	3	0	3	27	39	86
6564	Lynden	North-west Normal School	J. R. Bradley	1886	Non-sect.....	2	1	2	27	35	45
6565	Montesano	Chelan Valley Academy *	Hiram F. White	1885	Presb.....	3	1	7	5	12	15
6566	Olympia	Collegiate Institute *	L. E. Pollansbee	1883	M. E.....	3	2	5	65	45	110
6567	Sumner	Sumner Academy.....	Alex. Scott	1884	Presb.....	2	2	4	18	19	37
WEST VIRGINIA.											
6568	Charleston.....	St. Mary's Academy.....	Sister Mary Felix.....	1861	R. C.....	.....	.....	3	45	60	105
WISCONSIN.											
6569	Albion	Albion Academy.....	Rev. S. L. Maxson, A. M.	1863	7-Day Bap.....	3	3	6	100	30	30
6570	Beaver Dam	Wayland Academy	Rev. G. F. Lunfield	1855	Baptist.....	3	5	8	56	65	121
6571	Berlin	Berlin High School	A. F. Rote	1857	.....	1	2	3	43	49	91
6572	Evansville	Evansville Seminary	Rev. J. E. Coleman, A. M.	1855	Free Meth.....	2	4	6	145	92	237
6573	Waukesha	Carroll College.....	W. L. Rankin, A. M., PH. D.	1846	Presb.....	2	3	5	68	43	111

* Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88.

DIVISION C.—*Private Schools for Both Sexes.*—PART II.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Re-novations Received During the Year.
	2	15	16	17	18	19	20	21	22
ALABAMA.									
1	Andrews Institute*.....	.....	.....	.....	.....	.....	.....	.....	.....
2	Ashland High School.....	\$9-30	.....	.....	\$2,000	.....	.....	\$300	.....
3	Trinity Normal School.....	6-8	400	\$40	12,000	0	0	0	\$3,050
4	Wilcox Male and Female Institute.*	20-30	.....	.....	.....	.....	.....	.....	.....
5	Centreville School.....	30	.....	.....	2,000	.....	.....	.....	.....
6	Fort Deposit Institute.....	20-40	.....	.....	1,500	.....	.....	60	.....
7	Furman Academy.....	18-36	.....	.....	2,000	.....	.....	.....	.....
8	Gaylesville High School.....	15-40	0	50	5,000	0	0	185	.....
9	South Alabama College...	20-50	700	.....	3,000	.....	.....	.....	.....
10	Male and Female School*..	25	.....	.....	.....	.....	.....	.....	.....
11	Travis Academy*.....	18-27	.....	.....	500	.....	.....	.....	.....
12	Jasper High School.....	.....	.....	.....	5,000	.....	.....	.....	.....
13	German Evangelical Lutheran School.	0	.....	.....	1,000	.....	.....	.....	.....
14	Opelika Seminary.....	30	300	325	2,000	.....	.....	.....	.....
15	Perdue Hill High School..	20-40	75	25	1,200	0	.....	120	0
16	Moore Academy.....	20-35	0	.....	4,000	.....	.....	120	2,595
17	Prattville Academy.....	25	.....	.....	.....	.....	.....	230	.....
18	Remlap Institute*.....	15	.....	.....	350	.....	.....	.....	.....
19	Roanoke Institute.....	12	.....	.....	7,000	.....	.....	250	.....
20	Six-Mile Academy.....	15-30	107	.....	.....	.....	.....	125	.....
21	Springville Educational Institute.*	30	.....	.....	2,000	.....	.....	.....	.....
22	Talladega College.....	4-9	4,000	300	93,000	\$29,959	\$1,500	0	4,300
23	Wetumpka Academy*.....	.....	1,000	.....	1,500	.....	.....	.....	.....
ARKANSAS.									
24	Central Collegiate Institute.*	20-40	200	.....	13,000	.....	.....	.....	.....
25	Ouachita College.....	35	1,000	50	31,000	.....	.....	.....	.....
26	Fort Smith District High School.	17-31	300	200	6,000	.....	.....	.....	.....
27	Male and Female Academy.	15-25	150	.....	1,800	.....	.....	0	.....
28	Evening Shade High School.	23	200	250	1,000	.....	.....	750	.....
29	Helena Seminary.....	20-80	.....	.....	.....	.....	.....	.....	.....
30	La Crosse Collegiate Institute.	20-50	.....	.....	1,500	.....	.....	.....	.....
31	Male and Female College..	40	400	.....	10,000	.....	.....	.....	600
32	Rogers Academy.....	15	380	120	17,500	0	0	0	2,782
33	Searcy College*.....	30-50	.....	.....	.....	.....	.....	.....	.....
CALIFORNIA.									
34	Convent of Our Lady of Lourdes.	.....	.....	.....	.....	.....	.....	0	.....
35	Commercial and Normal School.*	60	897	.....	4,000	.....	.....	.....	.....
36	Healdsburg College*.....	30-50	400	.....	75,000	.....	.....	.....	.....
37	Washington College*.....	.....	.....	.....	.....	.....	.....	.....	.....
38	Lakeport Academy.....	30-40	400	150	.....	.....	.....	.....	.....
39	College of Notre Dame.....	40	1,070	.....	12,000	0	0	0	.....
40	Placerville Academy.....	30-50	200	.....	15,000	0	0	.....	.....
41	Red Bluff College*.....	40-60	650	.....	.....	.....	.....	.....	.....
42	Howe's High School*.....	72	400	.....	0	.....	.....	.....	.....
43	Westminster School*.....	40-120	.....	.....	15,000	.....	.....	.....	.....
44	Normal School.....	19-45	25	.....	2,000	.....	.....	.....	.....
COLORADO.									
45	Longmont College.....	45	75	200	15,000	9,000	450	.....	1,200
46	Salida Academy.....	18, 36	0	150	8,000	.....	.....	.....	.....
47	Tillotson Academy.....	30	200	100	15,000	.....	.....	.....	230

* Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	15	16	17	18	19	20	21	22
CONNECTICUT.									
48	Academy of the Holy Family.	\$150	300	.....	.....	.....	.....	0	0
49	Bacon Academy	18	360	\$50	\$5,000	\$35,000	\$1,800	.....	.....
50	Elmwood School.....	15-24	75	.....	9,000	.....	.....	.....	.....
51	Mystic Valley English and Classical Institute.	50	600	900	10,000	.....	.....	0	0
52	New Canaan Institute*.....	40	.....	.....	.....	.....	.....	.....	.....
53	Upson Seminary.....	a 600	300	.....	8,000	.....	.....	0	.....
54	Robbins School.....	60	.....	.....	.....	.....	.....	.....	.....
55	Norwich Free Academy.....	15, 45	5,000	3,000	200,000	160,000	10,000	0	.....
56	McLean Seminary.....	50	800	200	12,000	0	.....	0	.....
57	Seaside Seminary	36	500	50	7,000	0	0	0	0
58	Connecticut Literary Institution.	.....	1,700	.....	.....	.....	.....	.....	.....
59*	Wilton Academy.....	.....	.....	.....	.....	.....	.....	.....	.....
60	Parker Academy.....	40-50	.....	.....	2,000	.....	.....	.....	.....
61	Woodstock Academy*	25	3,000	.....	18,000	25,000	.....	.....	.....
DAKOTA.									
62	Arvilla Academy.....	24, 30	600	300	3,500	0	0	0	.....
63	Angustana College.....	18	350	.....	8,000	18,000	1,260	.....	\$375
64	Fargo Academy.....	40-60	200	.....	.....	.....	.....	0	.....
65	St. Bernard's College.....	5-30	500	.....	24,000	.....	.....	.....	.....
66	Groton College*.....	37	500	.....	25,000	.....	.....	.....	2,000
67	Jamestown College*.....	36	500	.....	35,000	.....	.....	.....	.....
68	Redfield College.....	30	100	.....	28,000	.....	.....	\$550	3,500
69	Scotland Academy.....	24-20	40	.....	9,000	.....	.....	538	100
70	All Saints School*.....	30-60	250	.....	.....	.....	.....	.....	.....
71	Sioux Falls University.....	26	300	200	40,000	0	.....	0	1,500
72	Yankton College.....	30	3,000	15,000	40,000	.....	.....	.....	.....
DELAWARE.									
73	Conference Academy.....	45	1,500	150	60,000	.....	.....	.....	.....
74	Academy of Newark.....	40	700	300	12,000	.....	.....	.....	.....
75	Friends' School.....	50	200	800	30,000	20,000	.....	0	.....
DISTRICT OF COLUMBIA.									
76	Friends' Select School.....	64-90	400	400	35,000	.....	.....	.....	.....
77	St. Cecilia's Academy.....	12-40	.....	.....	.....	.....	.....	0	30
FLORIDA.									
78	Daytona Institute.....	24-35	200	.....	.....	.....	.....	.....	.....
79	De Land University.....	32-60	1,500	500	25,000	20,000	1,600	0	14,390
80	East Florida Seminary.....	25	1,000	0	35,000	46,150	2,848	1,000	0
81	Cookman Institute.....	.....	300	175	15,000	.....	.....	.....	1,092
82	Convent of Mary Immaculate.	20	200	.....	75,000	.....	.....	.....	.....
83	Florida Institute*.....	7	500	.....	7,000	.....	.....	.....	.....
84	Seminary West of the Suwannee River.*	0	0	150	13,500	75,000	4,600	0	0
GEORGIA.									
85	Acworth High School.....	15-35	.....	.....	.....	.....	.....	.....	.....
86	Storrs School*.....	9	.....	.....	3,000	.....	.....	.....	.....
87	West End Academy.....	15	350	50	10,000	0	0	300	0
88	Attapulgus High School.....	25	.....	.....	600	.....	.....	123	.....
89	Bairdstown Academy.....	20	.....	.....	500	.....	.....	175	5
90	Bluffton Academy*.....	20	0	.....	500	.....	.....	.....	.....

* Statistics of 1886-87.

a Includes board.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	15	16	17	18	19	20	21	22
	GEORGIA—continued.								
91	Boston Institute.....	\$25	.....	.....	\$1,000	.....	.....	.....	.....
92	Female College and Male Institute.*	15-25	200	.....	5,000	.....	.....	.....	.....
93	Byron High School.....	25-30	.....	.....	1,500	.....	.....	\$150	.....
94	Cherokee Wesleyan Institute.	20-40	.....	\$200	2,000	.....	.....	628	.....
95	St. Mary's Institute.....	20-40	0	0	4,000	.....	.....	.....	.....
96	Male and Female High School.	20	.....	.....	2,000	.....	.....	.....	.....
97	Oakland Seminary.....	20	0	0	1,000	.....	.....	240	.....
98	Crawford Academy.....	20-30	.....	.....	2,300	.....	.....	300	.....
99	Danielsville High School..	15	.....	.....	1,400	.....	.....	180	.....
100	South Georgia Male and Female College.	30	250	200	10,000	.....	.....	400	.....
101	Male and Female High School.*	20-40	840	.....	1,800	.....	.....	.....	0
102	Fort Valley Seminary.....	13	.....	.....	1,500	.....	.....	.....	.....
103	Oak Grove Academy*.....	20	0	.....	800	.....	.....	.....	0
104	Fleming High School*.....	10	.....	.....	1,000	.....	.....	.....	.....
105	Grantville High School....	15-35	.....	.....	1,200	.....	.....	.....	.....
106	Harlem Institute*.....	20	0	.....	2,000	.....	.....	.....	0
107	Planters' High School.....	18	0	0	300	0	0	175	0
108	Hoschton High School.....	12	.....	.....	800	.....	.....	.....	.....
109	Martin Institute*.....	20	.....	.....	16,500	\$15,000	.....	.....	0
110	Lawrenceville Seminary....	22	0	.....	3,000	.....	.....	.....	.....
111	Lincolnton High School*....	23	.....	.....	500	.....	.....	.....	.....
112	Washington Institute.....	30	.....	.....	7,000	.....	.....	.....	.....
113	Lost Mountain Academy....	5	0	0	400	0	0	70	.....
114	Lumpkin High School*.....	20-40	.....	.....	10,000	.....	.....	.....	.....
115	Lewis Normal School*.....	8	6,000	.....	20,000	.....	.....	.....	.....
116	Male and Female Institute	31	0	0	2,500	.....	.....	182	.....
117	Mrs. Nebhut's Home School.	25	.....	.....	.....	.....	.....	70	\$20
118	Marshallville High School	25	150	25	5,000	0	0	325	0
119	Monticello Academy.....	.....	.....	.....	.....	.....	.....	.....	.....
120	Morganton Academy*.....	.....	.....	.....	.....	.....	.....	.....	.....
121	Mt. Zion Seminary.....	16	50	.....	3,000	.....	.....	.....	150
122	Georgia School of Languages, Science, and Art.	40	5,000	2,000	50,000	.....	.....	350	.....
123	Norcross High School.....	20-40	.....	150	1,200	.....	.....	200	.....
124	Palmetto High School.....	12-30	0	0	1,000	0	0	.....	.....
125	Glenn Holly Academy.....	20	.....	.....	250	.....	.....	108	.....
126	Quitman Academy.....	30	0	.....	3,000	0	0	175	0
127	Rabun Gap Institute.....	100	.....	.....	700	.....	.....	88	.....
128	Rutledge High School.....	26	.....	.....	1,000	.....	.....	300	.....
129	Excelsior High School*.....	9-22	100	.....	1,500	.....	.....	.....	.....
130	Shady Dale Academy.....	20-30	.....	.....	1,000	.....	.....	.....	10
131	Sharpsburg Academy*.....	.....	.....	.....	.....	.....	.....	.....	.....
132	Smyrna High School*.....	.....	.....	.....	.....	.....	.....	.....	.....
133	Snow Spring High School....	15-35	.....	.....	1,500	.....	.....	.....	.....
134	Male and Female Academy.	30	.....	100	2,500	.....	.....	100	.....
135	Stone Mountain High School.	30	.....	.....	3,000	.....	.....	300	.....
136	Sugar Valley High School....	15	.....	.....	600	.....	.....	145	.....
137	Sumac Seminary.....	10-20	25	.....	2,000	.....	.....	168	.....
138	Summerville High School....	22	0	0	2,000	0	0	165	16
139	High School.....	36	.....	.....	1,200	.....	.....	.....	.....
140	Temple Academy*.....	.....	.....	.....	.....	.....	.....	.....	.....
141	R. E. Lee Institute.....	10-20	.....	125	10,000	.....	.....	500	.....
142	Toccoa Academy.....	20	.....	.....	1,200	.....	.....	180	.....
143	Villa Rica High School.....	12-30	.....	.....	1,200	.....	.....	.....	.....
144	Walesca High School.....	10	0	0	2,500	0	0	100	650

* Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for both Sexes.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	15	16	17	18	19	20	21	22
	GEORGIA—continued.								
145	Whitesburg Academy	\$25	.....	0	\$1,000	.....	.....	\$140	.....
146	High School.....	16-24	125	.....	1,500	.....	.....	.....	.....
147	Woodville High School.....	20	0	0	800	0	0	325	0
148	"Nannie Lou Warthen" Institute.	27	.....	.....	3,500	.....	.....	.....	\$1,000
149	Zebulon High School.....	20	0	0	1,000	0	0	.....	0
	IDAHO.								
150	Wilbur College*.....	36	600	.....	20,000	.....	.....	.....	.....
	ILLINOIS.								
151	Aledo Academy*.....	30	200	.....	5,000	.....	.....	.....	200
152	Union Academy of Southern Illinois.	31	400	\$30	4,000	\$1,300	\$91	.....	.....
153	Jennings Seminary*.....	36	200	.....	75,000	.....	.....	.....	.....
154	Bunker Hill Academy.....	40	500	500	30,000	.....	.....	.....	.....
155	German-American Academy.	40-100	700	300	25,000	.....	.....	.....	.....
156	German Institute.....	.....	.....	.....	.....	.....	.....	.....	.....
157	Lutheran Immanuel School.	12	.....	.....	25,000	.....	.....	.....	.....
158	St. Theresa's Academy	50	300	.....	.....	.....	.....	.....	.....
159	Dover Academy*.....	20	300	.....	.....	.....	.....	.....	.....
160	Du Quoin Seminary.....	25	5,000	500	25,000	.....	.....	0	.....
161	Howe Literary Institute	20	400	500	23,000	.....	.....	.....	.....
162	Elgin Academy.....	27	250	500	22,000	.....	.....	.....	3,000
163	Hayward Collegiate Institute.	32	250	50	10,000	.....	.....	.....	.....
164	St. Joseph's Academy	12	29	67	25,150	.....	.....	.....	.....
165	Gittings Seminary.....	20	.....	200	20,000	15,000	800	.....	.....
166	Lee's Academy.....	30	1,500	.....	4,500	.....	.....	.....	.....
167	Mt. Morris College.....	33	26,000	500	35,000	.....	.....	.....	.....
168	Port Byron Academy.....	24	100	125	10,000	40,000	.....	0	.....
169	Toulon Academy.....	18-30	0	.....	2,000	.....	.....	0	.....
170	Vermillion Academy.....	18	200	25	7,000	9,000	720	0	0
	INDIANA.								
171	Friends' Bloomingdale Academy*.....	24-30	400	.....	10,000	5,500	.....	.....	.....
172	Fairmount Academy	25	100	75	10,000	.....	.....	.....	.....
173	Westminster Seminary.....	50	500	150	12,000	.....	.....	.....	.....
174	Mrs. Price's School	40-48	.....	.....	.....	.....	.....	.....	.....
175	Central Academy.....	30	300	25	3,500	.....	.....	0	0
176	Roanoke Classical Seminary.	30	150	0	4,000	0	0	0	0
177	Spiceland Academy	25	500	200	10,000	4,000	.....	2,500	.....
178	Vincennes University	10-20	4,324	500	75,000	50,000	3,800	0	0
179	Union High School.....	27	200	50	10,000	5,500	375	0	0
	INDIAN TERRITORY.								
180	Indian University*.....	18	500	.....	29,000	.....	.....	.....	.....
181	Worcester Academy*.....	6-18	100	.....	10,000	.....	.....	.....	2,950
	IOWA.								
182	Ackworth Institute.....	24	400	50	3,000	.....	.....	.....	.....
183	Birmingham Academy.....	25	150	0	2,000	.....	.....	0	.....
184	Normal and Scientific Institute.	32	1,200	150	3,000	.....	.....	.....	.....

* Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—*Private Schools for Both Sexes*—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	15	16	17	18	19	20	21	22
	IOWA—continued.								
185	Burlington Institute*.....	\$25	1,800	.....	\$10,000	\$30,000	.....	.....	.....
186	First German Evangelical School.	8	.....	.....	20,000	.....	.....	.....	.....
187	German Evangelical Zion School.	8	.....	.....	20,000	.....	.....	.....	.....
188	Western Iowa College.....	50	30	\$100	.....	0	0	0	0
189	Decorah Institute.....	27	457	.....	4,500	.....	.....	.....	.....
190	Denmark Academy.....	24	3,000	750	25,000	15,000	.....	.....	.....
191	Danish High School*.....	.....	.....	.....	.....	.....	.....	.....	.....
192	Epworth High School*.....	22-27	600	.....	15,000	.....	.....	.....	.....
193	Pattersonville Educational Institute.*	20-50	350	.....	7,200	21,000	.....	.....	\$300
194	Iowa City Academy.....	32	100	300	.....	0	0	0	0
195	Jefferson Academy.....	24,30	1,500	300	5,000	.....	.....	0	.....
196	Knoxville Academy.....	20,30	.....	.....	.....	.....	.....	0	.....
197	Friends' Academy.....	22	600	50	8,000	0	0	0	25
198	New Providence Academy.	25	175	150	9,000	3,000	\$200	.....	50
199	Hazel Dell Academy.....	23	.....	.....	4,000	.....	.....	.....	.....
200	St. Boniface's School.....	.....	.....	.....	8,000	.....	.....	\$300	1,200
201	North-western Classical Academy.	210	964	30	7,200	0	0	0	.....
202	Cedar Valley Seminary...	27	1,000	400	25,000	8,000	400	0	2,000
203	Pleasant Plain Academy*.	15-25	325	.....	3,000	.....	.....	.....	100
204	St. Ansgar Academy.....	30	.....	.....	5,000	.....	.....	.....	.....
205	Norton Normal and Scientific Academy.*	42	1,200	.....	12,000	.....	.....	.....	.....
	KANSAS.								
206	Gould College.....	25	100	30	1,000	0	0	0	0
207	Kansas Christian College..	18-24	100	.....	10,000	2,500	75	.....	125
208	Bethany College.....	30-45	3,000	500	135,000	.....	.....	.....	4,600
209	Salina Normal University*	40	1,200	.....	40,000	.....	.....	.....	.....
210	Friends' Academy*.....	15-25	150	.....	6,000	.....	.....	.....	2,100
211	Lewis Academy.....	20-40	115	200	100,000	.....	.....	.....	.....
212	South-west Kansas College.	30	200	100	70,000	20,000	2,000	0	1,000
	KENTUCKY.								
213	Male and Female Institute.	30	.....	2,000	10,000	0	0	0	0
214	East Lynn College.....	.....	.....	.....	4,000	0	0	.....	0
215	Academy of Notre Dame..	10-20	.....	150	40,000	.....	.....	.....	.....
216	Crab Orchard College.....	30	.....	10	.....	.....	.....	.....	.....
217	Dudley Institute.....	40-75	.....	200	5,000	0	0	0	0
218	Fredonia Seminary.....	12	.....	.....	1,200	.....	.....	180	.....
219	Jackson Academy.....	24	100	0	6,000	.....	.....	.....	.....
220	La Fayette High School...	20-40	.....	.....	2,000	.....	.....	180	.....
221	Grayson Seminary.....	20-40	0	0	2,000	0	0	0	0
222	Lexington Normal Institute.*	60-11	150	.....	5,000	.....	.....	.....	.....
223	Presentation Academy.....	40	500	.....	.....	.....	.....	.....	.....
224	Browder Institute.....	40	40	30	5,000	.....	.....	200	.....
225	Princeton Collegiate Institute.	10-42	1,200	100	40,000	5,000	345	.....	2,076
226	Miss Sevier's School.....	15-30	.....	.....	6,000	.....	.....	.....	.....
227	Sharpsburg Male and Female College.*	20-40	450	.....	200	.....	.....	.....	.....
228	West Kentucky Classical and Normal College.*	40	750	.....	4,000	.....	.....	.....	.....

* Statistics of 1886-87.

a Incidental fee; free tuition.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART II.—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	15	16	17	18	19	20	21	22
	KENTUCKY—continued.								
229	Wallonia Institute.....	\$20-30	0	\$50	\$1,600	.....	.....	\$244	\$200
230	Male and Female High School.	30-60	200	0	10,000	0	0	0	0
231	Wingo College*	40	.....	.....	3,000	.....	.....	.....	.....
	LOUISIANA.								
232	Male and Female Institute	14-32	.....	.....	3,000	.....	\$1,200	1,160	.....
233	Mt. Lebanon College*	10-30	.....	.....	.....	.....	.....	.....	.....
234	Columbian Institute.....	30-70	300	.....	6,000	.....	.....	0	.....
235	German Evangelical Protestant School.	9	.....	.....	3,800	.....	.....	.....	.....
236	Picard Institute.....	25-100	.....	.....	15,000	.....	.....	.....	.....
	MAINE.								
237	East Maine Conference Seminary.	15-25	3,800	1,500	30,000	.....	.....	.....	.....
238	Fryeburg Academy.....	15,18	800	1,000	30,000	\$13,000	780	0	0
239	Gardiner High School.....	a21	150	350	.....	.....	.....	250	.....
240	Pennell Institute.....	24	276	500	20,000	25,000	1,200	500	.....
241	Classical and Scientific Academy.	30	450	.....	7,000	0	0	0	0
242	Hampden Academy.....	15	1,100	200	4,300	0	0	260	240
243	Hebron Academy*	16	650	.....	.....	34,000	.....	.....	15,000
244	Ricker Classical Institute..	24	500	200	46,000	40,000	2,400	120	75
245	Limington Academy*	10	100	.....	3,500	.....	.....	.....	.....
246	Lincoln Academy.....	14-24	100	300	8,000	11,000	750	.....	.....
247	Parsonfield Seminary*	8-10	50	.....	10,000	10,000	.....	.....	.....
248	Maine Central Institute* ..	21-24	600	.....	40,000	10,000	.....	.....	.....
249	May School	14	350	10	1,800	0	0	0	0
250	Coburn Classical Institute	24	241	300	48,000	52,000	3,220	0	0
251	Wilton Academy.....	15	150	100	5,000	0	0	0	0
	MARYLAND.								
252	F. Knapp's Institute*	b220-260	2,000	.....	40,000	.....	.....	.....	.....
253	Friends' Elementary and High School.	40-100	2,500	1,500	25,000	0	0	0	.....
254	Zion School*	26	.....	.....	40,000	.....	.....	.....	.....
255	Holy Trinity School.....	30	.....	.....	.....	.....	.....	.....	.....
256	North-east Classical Seminary.*	20	50	.....	500	200	.....	.....	.....
	MASSACHUSETTS.								
257	Cushing Academy.....	25	2,100	.....	.....	.....	.....	700	.....
258	Sanderson Academy*	15-18	40	.....	2,000	2,000	.....	.....	8,000
259	Powers Institute.....	21	5,000	600	5,000	.....	.....	.....	400
260	Howe School*	12	.....	.....	10,000	23,000	.....	.....	5,000
261	Houghton School.....	12	0	0	2,000	12,000	702	.....	0
262	Berkeley School.....	80-250	4,000	200	.....	.....	.....	.....	.....
263	Chauncey Hall Private School.	75-208	700	1,000	100,000	0	0	0	0
264	Hitchcock Free High School.	0	1,500	1,000	12,000	80,000	4,000	0	0
265	Everett School*	80	.....	.....	.....	.....	.....	.....	.....
266	Private School for Boys and Girls.	120	.....	.....	.....	.....	.....	.....	.....
267	Deerfield Academy.....	a18	.....	800	23,000	.....	.....	0	.....
268	Nichols Academy.....	24	2,200	4,500	50,000	8,000	400	1,000	1,500
269	Partridge Academy.....	20	310	250	10,000	25,000	1,250	400	.....
270	Bradford-Matthew Chaloner-Durfee High School.	40	1,000	3,000	500,000	50,000	2,500	.....	.....

* Statistics of 1886-87.

a For non-residents.

b Includes board.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	15	16	17	18	19	20	21	22
	MASSACHUSETTS—cont'd.								
271	Lawrence Academy.....	\$18	.....	\$200	\$3,000	\$10,000	\$800	0	0
272	Dean Academy.....	30	700	500	200,000	58,000	3,400	0	.....
273	Lawrence Academy.....	21-30	2,000	1,000	30,000	30,000	1,500	.....	.....
274	Hanover Academy.....	25,26	200	200	3,500	1,000	50	0	.....
275	Smith Academy.....	36	300	1,500	20,000	55,000	2,000	0	.....
276	Derby Academy*.....	6-16	.....	.....	.....	.....	.....	.....	.....
277	Private School.....	75	100	.....	2,800	.....	.....	.....	.....
278	Tabor Academy.....	a15	0	500	20,000	0	0	0	.....
279	Eaton School.....	40	.....	8,000	.....	0	0	0	0
280	Monson Academy.....	21-27	1,326	1,500	40,000	34,256	2,000	.....	.....
281	Admiral Sir Isaac Coffin Lancasterian School.	8	1,200	700	10,000	42,000	2,200	0	0
282	Friends' Academy.....	100-150	1,000	300	25,000	.....	.....	.....	.....
283	New Salem Academy*.....	22	200	.....	15,000	5,000	.....	.....	.....
284	The Swain Free School.....	.....	1,060	.....	.....	.....	.....	.....	.....
285	Arms Academy.....	24-27	100	.....	17,582	27,812	1,666	0	\$1,000
286	Sawin Academy.....	18	50	200	27,000	20,000	1,400	\$325	.....
287	Thayer Academy.....	a75	425	1,000	112,000	250,000	14,000	0	0
288	South Lancaster Academy	18-27	333	.....	44,138	.....	.....	.....	.....
289	Bristol Academy.....	32-30	200	350	20,000	8,000	680	169	0
290	Westford Academy*.....	18	300	.....	5,500	45,000	.....	.....	.....
291	English and Classical School.	100	2,500	400	15,000	0	0	0	0
292	Wesleyan Academy.....	30-40	5,300	3,200	125,256	12,000	700	0	.....
293	Glen Seminary.....	50	.....	50	2,500	.....	100	.....	.....
	MICHIGAN.								
294	Raisin Valley Seminary...	18,22	500	2,500	30,000	20,000	1,200	.....	.....
295	Grand Traverse College School.	15	480	.....	10,000	30,000	1,000	0	350
296	German-American Semi- nary.	15	520	285	25,000	.....	.....	.....	.....
297	Spring Arbor Seminary....	12-24	350	50	10,000	0	0	0	0
	MINNESOTA.								
298	Excelsior Academy.....	23,25	75	5	20,000	10,000	800	.....	2,000
299	School of the Blessed Sac- rament.	b125	.....	.....	.....	.....	.....	.....	.....
300	Minneapolis Academy.....	42	.....	150	7,500	.....	.....	0	200
301	St. Olaf's School.....	30	465	50	30,000	.....	.....	.....	125
302	Pillsbury Academy.....	12-25	1,000	50	35,000	45,000	2,700	.....	.....
303	Gustavus Adolphus Col- lege.	25	3,000	300	40,000	.....	3,000	0	.....
304	Wesleyan Methodist Semi- nary.	18	794	200	20,000	10,000	1,000	.....	1,000
305	Lutheran Seminary and Institute.	24	100	.....	12,000	.....	.....	.....	.....
	MISSISSIPPI.								
306	Buena Vista College.....	16-24	500	200	4,000	0	.....	0	0
307	Cooper Normal College....	40	3,000	250	10,000	.....	.....	0	0
308	Fayette Academy.....	25-40	.....	.....	3,000	.....	.....	.....	.....
309	Gulf Coast College.....	18-45	400	.....	8,000	.....	.....	.....	.....
310	Harpersville College.....	45	700	450	3,000	.....	.....	0	.....
311	Jackson Collegiate Acad- emy.	40-50	.....	.....	6,000	.....	.....	.....	.....
312	McComb City Academy*....	20	.....	.....	.....	.....	.....	.....	3,000
313	Meridian Academy*.....	.....	187	.....	4,000	.....	.....	.....	.....
314	Male and Female College.	20-40	150	0	3,000	0	0	480	.....
315	Male and Female High School.	30	300	.....	2,000	.....	.....	320	.....

* Statistics of 1886-87.

a For non-residents.

b Includes board.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	3	15	16	17	18	19	20	21	22
	MISSOURI.								
316	Watson Seminary	\$20-40	600	.....	\$2,000	\$10,000	\$500	.....	\$500
317	Avalon College*	25	1,000	.....	25,000	6,000	.....	.....	.....
318	Brashear Academy	25	.....	.....	3,000	.....	.....	.....	.....
319	Brookfield College	29	1,200	\$100	15,000	.....	.....	.....	150
320	Parrish Academy*	25-40	100	.....	3,000	.....	.....	.....	.....
321	Butler Academy	23	150	100	8,000	0	0	0	0
322	Mrs. Tiernan's Select School .....	.....	.....	.....	2,000	.....	.....	.....	.....
323	German Lutheran School*	8	.....	.....	.....	.....	.....	.....	.....
324	Cassville Collegiate Institute	15	.....	.....	25,000	.....	.....	\$175	.....
325	Clarksburg College	30	100	25	4,000	0	0	0	0
326	Hooper Institute	23-33	1,000	150	5,000	.....	.....	.....	.....
327	Clinton Academy	23-43	300	25	6,000	.....	.....	.....	.....
328	Farmington Baptist College*	15-30	.....	.....	8,000	.....	.....	.....	.....
329	English Concordia College	22	.....	.....	2,500	.....	.....	0	.....
330	Henderson Academy	24	200	.....	2,500	.....	.....	.....	.....
331	Houston Institute	20	946	250	6,000	.....	.....	1,200	.....
332	Humphreys College	20	.....	.....	6,000	.....	.....	.....	.....
333	Kidder Institute*	27	1,200	.....	25,000	.....	.....	.....	300
334	Glendale Institute	30	300	25	.....	.....	.....	.....	.....
335	Western Academy	30	1,000	.....	5,000	.....	.....	.....	.....
336	McCune College	30-50	1,600	50	12,000	.....	.....	.....	.....
337	Mayfield-Smith Academy	14-27	0	0	4,000	0	0	0	0
338	Marionville Collegiate Institute	32	400	40	8,000	.....	.....	.....	.....
339	Oaklawn College	27	250	.....	10,000	.....	.....	.....	.....
340	Otterville College	33	120	75	4,000	0	0	0	.....
341	Centenary High School	40	.....	150	5,000	.....	.....	.....	600
342	St. Joseph's School*	10	200	.....	10,000	.....	.....	.....	.....
343	St. Paul's College	20-40	2,000	.....	8,000	.....	.....	.....	.....
344	Park College*	22-30	4,000	.....	102,000	8,000	.....	.....	26,353
345	Paynesville Institute	50	1,100	400	15,000	2,000	200	.....	.....
346	Collegiate Institute	30	1,000	150	10,000	.....	.....	.....	.....
347	Plattsburg College	27-42	1,600	100	10,000	.....	.....	.....	.....
348	Van Rensselaer Academy*	20	.....	.....	.....	.....	.....	.....	0
349	Shelbina Collegiate Institute	20-40	.....	125	12,000	.....	.....	0	0
350	Miller County Institute	24	.....	.....	2,150	0	.....	.....	.....
	NEBRASKA.								
351	The Blake School	30	400	.....	2,500	.....	.....	.....	.....
352	Bellevue College	30	600	.....	30,000	5,000	800	0	500
353	Franklin Academy	28	1,200	300	16,000	2,000	200	.....	3,300
354	Oakdale Academy	20	0	0	4,000	0	.....	.....	500
355	Luther Academy	25	350	.....	16,000	0	0	0	594
	NEW HAMPSHIRE.								
356	Proctor Academy	18-24	600	500	20,000	.....	.....	.....	.....
357	Atkinson Academy*	24	1,200	.....	6,000	20,000	.....	.....	.....
358	Candia Village High School .....	.....	.....	.....	.....	.....	.....	.....	.....
359	Watson Academy	33	500	.....	.....	5,000	200	.....	.....
360	Franklin High School	15	375	300	35,000	0	0	544	0
361	Gilmanston Academy	15,18	825	.....	15,000	.....	.....	0	0
362	Kingston Academy	16	0	150	2,500	3,000	150	0	0
363	Lancaster Academy	23	.....	200	5,000	2,000	80	0	0
364	Colby Academy	21,30	2,650	500	100,000	81,000	5,000	0	30,000
365	Coe's Academy	15	500	200	20,000	.....	.....	.....	500

* Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions received During the Year.
	2	15	16	17	18	19	20	21	22
	NEW HAMPSHIRE—cont'd.								
366	Northwood Seminary	\$18	500		\$5,000				
367	Pembroke Academy.....	17-21	600	\$100	5,000	\$20,300	\$1,211	0	\$500
368	Smith's Academy.....	80							
369	McGaw Normal Institute*	25	600		12,000	10,000			0
370	Austin Academy	12			5,000	4,400	176		
371	Simond's Free High School.	15-45	350	500	12,000	25,000	1,500	0	0
372	Brewster Free Academy..	0	200	250	10,000		17,500	0	
	NEW JERSEY.								
373	Farnam Preparatory School.	12-56			25,000	20,000	500	\$1,200	
374	Blair Presbyterian Academy.	40	1,000	50	50,000	100,000	6,000		
375	Westfield Friends' School*	50			5,000	4,000			
376	Brainerd Institute.....	a250	750	100	12,000	0			
377	Centenary Collegiate Institute.	42	1,300	350	220,000				
378	Peddie Institute	225	3,500	7,000	150,000	16,000	1,000	0	3,250
379	Hoboken Academy.....	22-100	1,000	700	20,000				
380	Hasbrouck Institute.....	100	400	250	20,000			0	0
381	Keyport Academy*.....	20-40	300		5,000				
382	Glenwood Institute.....	40	1,000	500	1,750	0	0	0	6100
383	Moorestown Academy	24-40			5,000	4,000	200		
384	Green Street German-American School.	12-24	530	1,600	30,000				300
385	Newton Collegiate Institute.	20-60	500	300	15,000	0	0		
386	Dearborn-Morgan School..	12-45	200	225	28,000			0	
387	Paterson Seminary	60	500	500					
388	Pennington Institute*.....	240	1,000		100,000				
389	South Orange Academy.....	40-100			12,200				
390	Deptford School.....	40	100	75					
	NEW MEXICO.								
391	Albuquerque Academy	9-25	150		5,000		2,100		
392	Las Vegas Academy.....	15-30	30		15,000				
393	Presbyterian Academy.....	30							
394	Santa Fé Academy*.....								
395	Academy of Our Lady of Lourdes.*	30			23,000				
396	Tiptonville Institute.....		150		5,000				
	NEW YORK.								
397	Adams Collegiate Institute.*	37	632		50,000				
398	Amenia Seminary.....	30-80	1,500	500	8,000	0	0	0	
399	Ives Seminary*.....	30	250		30,000	5,000			
400	Argyle Academy.....	22	200	175	3,500			23	
401	Bainbridge Academy.....	19-24	819	450	15,000		1,416		
402	Bedford Academy.....	20-48			2,500				150
403	Adelphi Academy.....	40-160	1,938	5,800	182,000	0	0	397	107,000
404	Chenevière Institute*.....	34-122			15,000				
405	Cazenovia Seminary.....	21-83	3,134	3,500	72,600	30,000	1,149	839	5,500
406	Cherry Valley Academy	15-24		150	4,600				
407	Cincinnati Academy.....	16-24	380	409	3,933	0	0	147	
408	Parker Union School.....	20	1,050	1,000	10,000	30,000	1,800	2,350	
409	Claverack College and Hudson River Institute.*	55	1,358		45,020				

* Statistics of 1886-87.

a Includes board.

b Gift of books.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Vol- umes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Perma- nent Productive Funds.	Income for the Year from Pro- ductive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Bene- factions Received During the Year.
	2	15	16	17	18	19	20	21	22
	NEW YORK—continued.								
410	Evening Classes of the Poppenhusen Institute...	0	2,171	.....	\$60,000	\$68,000	\$4,350	0	0
411	Dundee Preparatory School.	\$24	120	\$736	7,800	.....	.....	.....	.....
412	Marshall Seminary.....	25	897	794	13,843	0	0	0	\$300
413	Starkey Seminary.....	24	961	718	19,900	2,000	\$100	\$483	5,000
414	Munro Collegiate Insti- tute.	18	941	1,015	21,800	12,000	652	586	0
415	Fairfield Seminary.....	30	2,824	1,419	32,500	.....	.....	1,055	.....
416	Mt. Beacon Academy.....	50	.....	.....	17,000	.....	.....	.....	.....
417	Erasmus Hall Academy...	24-100	2,700	400	23,385	6,000	420	.....	.....
418	S. S. Seward Institute.....	12-30	400	150	.....	.....	.....	0	.....
419	Fort Edward Collegiate Institute.*	24-36	500	.....	83,000	.....	.....	.....	.....
420	Clinton Liberal Institute..	30	3,240	4,000	89,700	25,000	1,750	150	.....
421	Delaware Literary Insti- tute.	30	4,000	1,500	27,000	.....	.....	1,000	.....
422	Glens Falls Academy*.....	32-48	2,000	.....	15,000	.....	.....	.....	.....
423	Gowanda Academy.....	18	780	450	18,000	.....	.....	1,000	.....
424	Greenville Academy*.....	18-33	260	.....	3,000	.....	.....	.....	.....
425	Greenwich Union School.	18	1,500	500	15,000	.....	.....	1,721	.....
426	Hartwick Seminary.....	29	3,838	630	.....	.....	.....	249	34,333
427	Cook Academy.....	25-40	1,613	743	104,000	8,099	486	815	3,254
428	Hudson Academy*.....	60	200	.....	10,000	.....	.....	.....	.....
429	Lansingburg Academy*..	33	562	.....	9,626	10,000	.....	.....	650
430	Le Roy Academic Insti- tute.	35	1,068	760	25,400	6,000	360	285	.....
431	Friends' Academy*.....	20	1,000	.....	30,000	100,000	.....	.....	.....
432	Macedon Academy.....	6	300	442	4,100	0	0	686	0
433	Marion Collegiate Insti- tute.*	20	480	.....	16,589	.....	.....	.....	600
434	Mechanicville Academy...	21	561	500	22,979	.....	.....	283	.....
435	Sherman Academy.....	12	200	300	7,600	25,850	26,050	340	.....
436	Home School*.....	225	.....	.....	3,500	.....	.....	.....	.....
437	Nassau Academy.....	18-30	.....	200	5,000	.....	.....	.....	.....
438	Friends' Seminary.....	80	600	500	60,000	.....	.....	.....	.....
439	Heidenfeld Institute.....	120	400	250	32,000	.....	.....	.....	.....
440	Heywood Collegiate Insti- tute.	68-200	.....	.....	30,000	.....	.....	.....	.....
441	St. Matthew's Academy...	22-100	.....	.....	.....	.....	.....	.....	.....
442	School of Preparation for Business or College.	250	800	400	90,000	0	0	0	0
443	Cary Seminary*.....	21	867	.....	22,398	20,000	.....	.....	.....
444	Onondaga Academy.....	25	1,322	426	12,000	1,600	96	.....	.....
445	Oxford Academy.....	24	1,498	750	23,352	8,979	440	754	1,000
446	Evans Academy.....	6-15	345	240	9,000	15,000	977	11	.....
447	Pike Seminary.....	25	500	800	12,000	20,000	1,200	1,000	.....
448	Seymour-Smith Academy	45	388	261	13,804	0	0	152	.....
449	Pompey Academy.....	21	475	176	5,400	250	15	.....	.....
450	Quincy School.....	40,48	.....	.....	4,500	.....	.....	0	.....
451	Pulaski Academy.....	18-36	456	550	17,850	.....	.....	685	0
452	Chamberlain Institute and Female College.	21	1,200	.....	64,000	40,000	2,000	.....	.....
453	Red Creek Union Semi- nary.	24	625	425	10,965	.....	.....	992	.....
454	Rensselaerville Academy	12-32	295	284	4,830	.....	.....	.....	.....
455	St. Peter's Academy.....	16	400	.....	25,000	0	.....	0	.....
456	Saugerties Institute.....	16-40	0	0	7,000	.....	.....	.....	.....
457	Sauquoit Academy*.....	24-30	115	.....	3,500	.....	.....	.....	.....
458	Union Classical Institute..	36	529	744	27,000	.....	1,200	550	.....
459	Union School and Acad- emy.	15	700	450	10,000	.....	.....	945	.....

* Statistics of 1886-87.

a Includes board.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	15	16	17	18	19	20	21	22
	NEW YORK—continued.								
460	Sodus Academy	\$20	274	\$539	\$3,520			\$750	
461	Griffith Institute.....	5.8	666	672	20,000	\$10,600	\$706	2,715	0
462	Stamford Seminary.....	a21-80	2,000	500	12,000			1,600	
463	Staten Island Academy.....	75	3,400	2,000	19,800			143	\$3,000
464	Unadilla Academy.....	21	429	250	5,500	10,000	600	580	
465	Wilton Seminary*.....	30-50	100		6,000				
466	Yates Academy.....	5-7	287	150	3,200			567	
	NORTH CAROLINA.								
467	Archdale High School*....	15-35	100		3,000				
468	Friends' Academy.....		52		600			88	
469	Ashpole Institute.....	17-33			1,000				
470	Pamlico Male and Female Institute.	15-30							
471	Belvidere Academy.....	16-22	25		1,000				
472	Holt's School.....	10-20		20					
473	Burnsville High School*..	80			5,000				
474	Cedar Grove Academy.....	25-40			450	0	0		
475	Trinity School.....	20-99			4,000	0	0	0	0
476	Concordia College.....	40	300	50	5,000			0	0
477	Gaston College.....	35	1,000	0	10,000	0	0	0	0
478	Elizabeth City Academy..	25-35	50	40	5,000				
479	Ellerbe Springs Academy.*								
480	Enochville High School...	12			500			160	
481	Fairfield Academy*.....	20-60	85		5,000				
482	Fork Academy*.....	16-35	200		1,500				
483	Literary and Theological School.*	1-3	400		8,000	3,000			1,500
484	Fremont Institute.....	25	110	150	4,000	1,500	90	0	175
485	Germantown Institute.....	25	50	25	1,200				
486	Graham College.....	45	200		5,000				
487	Bennett Seminary.....	0	1,500	100	15,000				
488	Male and Female Institute.	20-40	0	50	10,000			0	
489	Claremont College.....	10-40	25		10,000				
490	Classical Institute.....	15-40	0	25	2,500	0	0	0	0
491	Holly Springs Institute*..	30							
492	Collegiate Institute.....	16-30			2,000			265	
493	Huntersville High School.*	12-36	0		6,000				0
494	Kinston College.....	150	100	60	3,500			0	0
495	Somerville Institute*.....	20	150		500				
496	Brown Seminary.....	10, 12			3,000				
497	Mooreville Academy*.....	66							
498	Moravian Falls Academy..	10-40	230	0	1,500	0	0	90	
499	Gilliam's Academy.....	10-25	100		3,000				
500	Mt. Vernon Springs Academy.	12-40	300		2,100				
501	Oak Ridge Institute.....	40	2,500	300	10,000			0	
502	Male and Female Academy.	25		25					
503	Nahunta Academy.....	25	100			2,500		100	
504	Selma Academy.....	20-30		15	1,500	0	0	0	0
505	Barnes' School*.....	30-60			250				
506	Summerfield High School	15-30							
507	Troy High School*.....	40	50		1,000				0
508	Warsaw Institute*.....	16-32			3,000			0	0
509	Grange High School.....	20-30			600				
510	Yadkin College High School.	12-60	200		10,000			0	

* Statistics of 1886-87.

a For non-residents.

b For a month.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	15	16	17	18	19	20	21	22
	OHIO.								
511	Grand River Institute	\$18-24	900	\$125	\$12,000	\$16,000	\$900	0	0
512	Friends' Boarding School.....	a115	600	700	40,000	6,000	.....	.....	.....
513	Chester Academy.....	20	125	.....	1,000	0	.....	0	0
514	Clermont Academy*.....	30	1,500	.....	3,000	.....	.....	.....	0
515	Ewington Academy.....	23	.....	.....	1,000	.....	.....	0	0
516	Fultonham Academy.....	24	150	100	12,000	.....	.....	\$600	.....
517	Gallia Academy	25	500	150	6,000	10,000	.....	0	0
518	Green Spring Academy	30	150	400	25,000	.....	.....	0	0
519	Harlem Springs College.....	40	700	.....	12,000	.....	.....	0	.....
520	Western Reserve Academy.....	34	900	250	48,830	2,400	.....	0	.....
521	New Hagerstown Academy.....	12-36	100	.....	.....	.....	.....	.....	.....
522	Green Town Academy.....	25	1,600	500	5,000	0	0	0	0
523	Poland Union Seminary.....	27	500	.....	12,000	15,000	900	0	.....
524	Savannah Academy.....	25	500	250	5,000	2,500	250	.....	.....
525	New Lyme Institute.....	18-24	550	.....	15,000	.....	.....	.....	.....
526	Salem Academy.....	20-30	740	50	4,000	750	60	.....	.....
527	Springfield Seminary*.....	45, 75	.....	.....	30,000	.....	.....	.....	.....
528	Plains Seminary.....	16	200	.....	800	.....	.....	.....	.....
529	Otterbein Institute.....	30	5,000	3,000	50,000	60,000	4,000	.....	\$10,000
	OREGON.								
530	La Creole Academic Institute.....	16-24	100	25	5,000	5,756	430	0	.....
531	Drain Academy.....	20-35	40	0	2,500	.....	.....	600	0
532	St. Scholastica's Convent School.....	10-15	100	.....	3,000	0	.....	0	0
533	Grand Ronde School.....	.....	.....	.....	.....	.....	.....	.....	.....
534	Friends' Pacific Academy.....	24-29	100	125	500	0	0	0	25
535	Independent German School.....	20	0	0	20,000	0	0	0	0
536	Wasco Independent Academy.....	24-56	800	600	25,000	12,000	960	0	0
	PENNSYLVANIA.								
537	Longview School.....	40	.....	.....	10,000	.....	.....	.....	.....
538	Chester Academy.....	50-58	500	300	15,000	.....	.....	.....	.....
539	Maplewood Institute.....	a 300	2,000	1,000	30,000	.....	.....	.....	.....
540	Dorlestown Seminary*.....	60-70	400	.....	25,000	.....	.....	.....	0
541	Home Boarding School*.....	150-180	.....	.....	.....	.....	.....	.....	.....
542	Erie Academy	20-40	.....	.....	50,000	18,000	1,100	0	3,200
543	Keystone Academy*.....	36	3,000	.....	50,000	.....	.....	.....	.....
544	Abington Friends' School.....	25-55	.....	200	30,000	20,000	1,200	0	1,800
545	Martin Academy.....	12-20	20	300	3,000	15,000	900	.....	.....
546	Wyoming Seminary.....	a 200	1,900	1,700	224,000	25,000	7,000	.....	.....
547	Buckingham Friends' School.....	0	200	.....	.....	.....	500	0	.....
548	Langhorne Friends' School.....	4-14	.....	65	2,700	9,000	450	.....	5,000
549	Stone Valley Academy.....	32-40	.....	.....	.....	.....	.....	.....	.....
550	Ingleside Academy.....	33	.....	.....	.....	.....	.....	.....	.....
551	Meyersdale Preparatory School.....	15-25	100	100	1,800	.....	.....	.....	25
552	Mifflin Academy.....	32	.....	.....	2,000	.....	.....	.....	.....
553	Western Pennsylvania Classical and Scientific Institute.....	36-45	1,500	300	30,000	50	.....	0	.....
554	Laird Institute*.....	18-26	200	.....	.....	.....	.....	.....	0

* Statistics of 1886-87.

a Includes board.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—*Private Schools for Both Sexes.*—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions Received During the Year.
	2	15	16	17	18	19	20	21	22
	PENNSYLVANIA—cont'd.								
555	Palatinate College*.....	\$40	.....	.....	\$25,000	.....	.....	.....	.....
556	New Bloomfield Academy	40	650	\$300	6,500	.....	.....	.....	.....
557	McElwain Institute.....	24	700	.....	7,500	.....	.....	.....	.....
558	North Washington Academy.	21	.....	.....	.....	.....	.....	.....	.....
559	Academy and School of Business.	45	400	300	16,000	.....	.....	0	0
560	Oxford Academy.....	40	.....	200	5,000	.....	.....	0	.....
561	Parkesburg Academy.....	40	.....	.....	.....	.....	.....	.....	.....
562	Perkiomen Seminary.....	16-48	.....	.....	6,000	.....	.....	.....	.....
563	Friends' Central High School.	80-120	300	2,000	100,000	.....	.....	.....	.....
564	Friends' Select School for Boys and Girls.	40-80	.....	500	40,000	\$89,000	\$484	0	.....
565	College Preparatory School.	150	.....	300	.....	.....	.....	.....	.....
566	Institute for Colored Youth.	0	3,500	2,500	.....	150,000	9,000	0	\$23,000
567	Pleasant Mount Academy	18-21	500	20	1,200	.....	.....	.....	.....
568	Airy View Academy.....	30	150	.....	8,000	.....	.....	0	0
569	Clarion Collegiate Institute.	25-37	500	275	6,000	0	0	0	320
570	School of the Lackawanna	50	1,800	800	30,000	.....	.....	.....	.....
571	Classical Department of Missionary Institute.	24-39	2,500	100	25,000	.....	.....	0	0
572	Sheakleyville Academy...	15	98	40	6,000	0	0	.....	.....
573	English and Classical Academy.	30	.....	250	3,500	0	0	0	0
574	Waterford Academy*.....	21	300	.....	5,000	4,500	.....	.....	.....
575	Westtown Boarding School.*	160	4,000	.....	.....	.....	.....	.....	.....
576	Williamsport-Dickinson Seminary.	20-43	.....	.....	75,000	.....	.....	0	0
577	York Collegiate Institute	40	1,200	5,000	75,000	100,000	6,000	0	.....
	RHODE ISLAND.								
578	Rogers High School.....	a 60	600	700	40,000	100,000	4,400	\$7,000	.....
579	School of Languages and Art.	50	2,400	.....	.....	.....	.....	0	.....
580	Friends' New England Boarding School.	b 300	6,200	500	500,000	200,000	9,000	0	43,000
	SOUTH CAROLINA.								
581	Wallingford Academy.....	2,4	300	0	13,500	0	.....	0	0
582	Clinton Presbyterian College.*	44	.....	.....	8,000	.....	.....	.....	.....
583	Penn School*.....	0	300	.....	800	.....	.....	.....	650
584	Grove School.....	10	0	0	400	0	0	115	0
585	Sheridan Classical School	25	200	.....	5,000	0	0	0	0
	TENNESSEE.								
586	Masonic Normal School*..	20	250	.....	.....	.....	.....	.....	.....
587	Ocoee High School.....	15	0	0	600	.....	.....	160	.....
588	Kingsley Seminary.....	10-20	25	100	2,200	.....	.....	150	.....
589	Chatata High School.....	10-30	.....	.....	1,200	.....	.....	300	.....
590	Church Hill High School..	10-25	0	0	4,000	0	0	70	0
591	Clifton Masonic Academy	15	72	50	2,500	.....	.....	.....	.....
592	Cog Hill Collegiate Institute.	11-25	100	0	1,200	.....	.....	420	.....
593	Maury Academy.....	5	.....	.....	5,000	12,000	480	.....	.....

* Statistics of 1886-87.

a For non-residents.

b Includes board.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Vol- umes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Perma- nent Productive Funds.	Income for the Year from Pro- ductive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Bene- factions Received During the Year.
	2	15	16	17	18	19	20	21	22
TENNESSEE—continued.									
594	Tennessee Valley College	\$12-28	100		\$3,500			\$120	
595	Friendsville Academy	10-20	800	\$100	8,000			150	
596	Gardner Academy		0	0	2,000			375	0
597	Grassy Cove Academy	4	50	150	1,500				\$100
598	Hartsville Masonic Insti- tute.	35	1,400	300	8,000				
599	Fairview Private School	18			2,000				
600	Chilhowee Institute*	13	0		1,500				
601	Knoxville College	4	1,220	100	60,000	0	0	0	13,000
602	London High School*	15	50		8,000				
603	Manchester College	25	500	10	1,000	0		0	
604	Mohawk Seminary	15-20	0		1,200			0	
605	Parrottsville High School	10-25	409		1,000	0	0	0	0
606	People's College*	20-35			16,000				
607	Santa Fé Institute	23	15	40	1,500			260	
608	Hardin College *	15-35	60		2,000				
609	Sequachie College	20			3,000				
610	Obion Normal College	28	800	5	2,000			600	0
611	Washington College	18	400	40	1,900	0	0	120	60
612	Edwards Academy	8-20	125	200	2,500			0	
613	Woodbury College	20-40	0		20,000			200	
TEXAS.									
614	German-English St. Mar- tin's School	2	75		12,000				
615	Buffalo Gap College	25	300	250	12,000				
616	Crockett Academy	26-46	0	0	1,500	0	0	720	0
617	Gonzales Male and Fe- male College.	20-40	120		25,000	\$10,000	\$500	2,000	
618	Hearne Academy	8	250		5,400				
619	Bishop College	8	700	150	55,000				540
620	Wiley University	10	1,345	75	80,000			0	147
621	Rhea's Mill Academy	25	20		1,000		500	360	0
622	German-English School*	32-44	250		20,000				
623	Coronal Institute	20-50			12,000				
624	San Saba College *	15-40	0		10,000				
625	Male and Female Insti- tute.	40	2,500	1,500	30,000				
626	Central College	14-36	17	400	3,500			1,028	10
627	Male and Female College.	32		50	7,000				
UTAH.									
628	Willard Academy*	0							
629	Brigham Young College*	12-24			35,000	100,000			0
630	Wahsatch Academy *	6-8	800		1,000				
631	Ogden Academy	3-6		300	20,000				
632	School of the Good Shep- herd.	16	49	25	20,000			0	1,000
633	Park Academy *	10	0						
634	Proctor Academy	9			10,000				
635	St. Mark's School	20-40	1,601		10,000	500	40		
636	Salt Lake Collegiate In- stitute.	30	325	400	3,450				4,207
637	Salt Lake Seminary	10-20	100						
VERMONT.									
638	Brigham Academy	15-24	225	510	14,000	30,000	1,800		80
639	Goddard Seminary	30	1,458	250	70,000	20,000	835	90	6,800
640	Derby Academy	18	200	50	8,000	2,300	115	0	

* Statistics of 1886-87.

TABLE 42.—STATISTICS OF ENDOWED ACADEMIES, SEMINARIES, AND OTHER PRIVATE SECONDARY SCHOOLS FOR 1887-88—Continued.

DIVISION C.—Private Schools for Both Sexes.—PART II—Continued.

	Name.	Annual Charge for Tuition.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for the Year from Productive Funds.	Amount of State or Municipal Aid for the Year.	Amount of Benefactions received During the Year.
	2	15	16	17	18	19	20	21	22
	VERMONT—continued.								
641	New Hampton Institution.*	\$15,18	3,000	.....	\$10,000	.....	.....	.....	.....
642	Lamoille Central Academy.	15	50	.....	5,000	.....	.....	\$190	.....
643	Lyndon Institute.....	18-30	704	\$3,000	25,000	\$30,000	\$1,500	.....	\$200
644	Burr and Burton Seminary.	26	500	200	15,000	30,000	1,800	0	50
645	Caledonia County Grammar School.	16	.....	500	10,000	15,000	900	.....	0
646	Troy Conference Academy.	30	1,940	600	50,000	3,000	130	.....	.....
647	St. Johnsbury Academy...	30	.....	1,000	150,000	100,000	6,000	.....	.....
648	Vermont Academy.....	30,36	1,200	300	100,000	100,000	.....	.....	25,000
649	Green Mountain Perkins Academy.*	60	250	.....	2,500	8,000	.....	.....	0
650	Thetford Academy*.....	15-21	.....	.....	4,000	5,000	.....	.....	0
651	Bell Institute*.....	12	0	.....	1,600	.....	.....	.....	.....
652	Green Mountain Seminary.	21	750	250	20,000	6,500	350	0	575
	VIRGINIA.								
653	Bluestone Mission School..	0	200	.....	6,000	0	0	0	0
654	Brentsville Seminary.....	30	300	.....	2,000	.....	.....	.....	.....
655	Shenandoah Institute.....	22	400	200	6,000	.....	.....	0	.....
656	Herndon Seminary.....	16-27	150	0	2,000	0	0	0	.....
657	Curry College.....	20	0	.....	2,000	.....	.....	275	0
658	Suffolk Collegiate Institute.*	19-49	600	.....	10,000	.....	.....	.....	.....
	WASHINGTON TERRITORY.								
659	Benj. P. Cheney Academy..	9	.....	40	.....	.....	.....	.....	.....
660	Colfax College.....	30	151	75	15,000	.....	.....	.....	5,000
661	Puget Sound Academy.....	30	1,000	.....	7,000	10,000	800	.....	500
662	Ellensburg Academy*.....	30	300	.....	8,000	.....	.....	.....	1,500
663	Washington Seminary.....	18-30	200	75	3,000	15,000	1,200	0	0
664	North-West Normal School	32	.....	.....	2,000	.....	.....	.....	923
665	Chehalis Valley Academy*	18	.....	.....	14,000	.....	.....	.....	14,000
666	Collegiate Institute*.....	20-40	.....	.....	10,000	.....	.....	.....	.....
667	Sumner Academy.....	24,30	.....	.....	5,000	.....	.....	.....	72
	WISCONSIN.								
668	Albion Academy.....	21-27	200	.....	35,000	.....	.....	.....	.....
669	Wayland Academy.....	26	2,000	.....	30,000	35,000	2,372	0	1,500
670	Berlin High School.....	15	573	.....	.....	.....	.....	216	.....
671	Evansville Seminary.....	12-24	400	.....	.....	.....	.....	.....	5,000
672	Carroll College.....	28-36	500	1,000	25,000	18,000	1,000	.....	3,900

*Statistics of 1886-87.

CHAPTER XI.

SUPERIOR INSTRUCTION.

Under the general head of superior instruction are included all institutions empowered by law to confer degrees, together with a number of seminaries for women offering a college curriculum but not conferring degrees.

The total of institutions in the various classes comprehended under the general head of superior, with the total of professors and students as reported to the Office for the current year, are as follows:

	Number of Schools.	Number of Instruc- tors.	Number of Students.
Colleges and seminaries for women.....	207	2,581	25,318
Universities and colleges of arts and sciences.....	6357	4,834	75,333
Colleges endowed with the national land grant	32	621	8,127
Schools of science not endowed with the national land grant...	30	218	7,076
Schools of theology	133	726	6,512
Schools of law.....	49	293	3,657
Schools of medicine, dentistry, etc	175	3,067	18,513
Total all classes	983	12,409	135,445

^aIncludes fifteen departments endowed with the national land grant. Vid. Table 52.

COLLEGES AND SEMINARIES FOR WOMEN.

ATTENDANCE OF WOMEN IN COLLEGES AND SEMINARIES.

Provision for the higher education of women is made in colleges and seminaries exclusively for women and in co-education colleges. The entire attendance of young women in the several classes of institutions, for the current year, so far as reported to this Office, was as follows:

Colleges and seminaries for women, Table 43	25,518
Colleges of arts and science, Table 47.....	75,333
Colleges of agriculture and the mechanic arts endowed with the national land grant, Table 52	917
Total	42,633

^a Includes 23 students in the course for women, Columbia College, New York.

Of the three hundred and fifty-seven colleges included in Table 49, two hundred and seventeen¹ admit women, and of these two hundred and one specify the sex of students in their reports. Of thirty-two independent colleges endowed with the national land grant twenty report students of both sexes and of these sixteen specify the sex of students in their reports. This gives a total of two hundred and thirty-seven co-education colleges reporting to the Office, and a total of two hundred and seventeen showing the relative proportion of men and women students.

The following shows the number of colleges and seminaries exclusively for women reporting to this Office each year from 1878 to 1888, inclusive (1883 omitted), with the number of instructors and students:

	1878.	1879.	1880.	1881.	1882.	1884.	1885.	1885-86.	1886-87.	1887-88.
Number of institutions	225	227	227	226	227	236	227	204	156	207
Number of instructors	2,478	2,323	2,340	2,211	2,721	2,989	2,892	2,123	1,854	2,531
Number of students.....	23,639	24,605	25,780	26,041	28,726	30,587	28,868	27,143	20,772	25,818

¹ Does not include Columbia College, New York.

SUMMARIZED STATISTICS.

Table 43 presents the summarized statistics of colleges and seminaries offering collegiate courses of instruction for women. One hundred and thirty-nine of the institutions report preparatory departments whose students comprise 24 per cent. of the entire number reported. One hundred and seventeen of the institutions report themselves as authorized by law to confer collegiate degrees. In general the curriculum offered by these does not differ materially from that of the seminaries not so authorized.

As regards financial particulars the information supplied is very incomplete.

The number of institutions represented in the total value of buildings and grounds is one hundred and seventy-two; in the total of productive funds, thirty-one; in the total income from the same, thirty. The receipts from tuition fees, which form the chief source of income, if charges for board and lodging be excluded, are reported from seventy-seven institutions. State appropriations were reported in eight instances and benefactions in thirty-three. The answers to the inquiry respecting total income have not been included in the summary. They were given in forty-three cases, but were sometimes found to be at variance with the itemized particulars.

TABLE 43.—Summary of Statistics of Institutions for the Superior Instruction of Women.

States.	Number of Schools.		Instructors.		Students.				Number of Graduates in 1887-88.	Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Fund.	Income from Productive Fund.	Receipts for the Last Year from Tuition Fees.	Income for the Year from All Sources except Charge for Board and Lodging.	Amount of Benefactions in 1887-88.	Number of Degrees Conferred at Last Commencement.
	Male.	Female.	Total.	Number in Preparatory Department.	Number in Collegiate Department.	Total Number in all Departments.												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Alabama.....	10	14	69	83	308	532	1,355	82	1,403	\$9,050	\$395,000	\$70,000	\$4,900	\$9,970	\$43,952		104	
California.....	3	10	30	40	83	145	350	16	4,000	2,000	300,000	0			4,900			
Connecticut.....	1	1	5	6	20	50	70	3	800		25,000							
Georgia.....	13	40	98	138	319	1,039	1,795	172	9,900	9,500	505,000	90,000	3,000	8,000			56	
Illinois.....	8	20	91	111	206	475	833	61	7,700	4,300	555,000			29,350	9,450	\$1,500	28	
Indiana.....	1				5		36	0										
Iowa.....	2	3	27	30	185	149	334	0	2,527		50,000						5	
Kansas.....	2	7	32	39	157	114	298	1	1,550	1,030	453,000			1,500	2,500	275	0	
Kentucky.....	19	36	141	177	596	1,111	1,882	125	13,740	7,670	462,500			78,202	45,041	500	80	
Louisiana.....	3	6	14	20	95	186	281	2	1,900	250	70,000	27,000	2,500	2,500			2	
Maine.....	2	15	10	25	80	230	436	55	8,550	5,600	206,000	130,000	6,500	7,458	16,958	53,000	15	
Maryland.....	5	9	47	56	157	357	518	38	11,578	2,325	151,500	21,000	1,200	6,690	10,000	10,000	18	
Massachusetts.....	9	100	178	278	87	1,309	1,933	50	70,265	34,750	3,035,000	965,584	45,533	237,637	104,451	89,817	124	
Michigan.....	1		7				41	4	1,438	1,700	30,000	3,900	2,000	7,200	2,000	7,925	14	
Minnesota.....	3	6	29	35	85	229	298	27	4,650	1,000	210,000	3,900		46,800	30,922	7,925	0	
Mississippi.....	13	16	73	110	298	776	1,405	37	6,500	975	318,000	57,000	3,700	11,900	11,900	21,000	46	
Missouri.....	14	43	122	165	485	554	1,467	37	9,250	4,500	520,000			31,600	13,100	21,000	29	
Nevada.....	1		7				73	1	400	800	20,000			10,000	2,920	170,310	14	
New Hampshire.....	3	7	18	25	5	248	372	20	2,550		225,000	32,000	1,920	2,500			9	
New Jersey.....	3	5	22	27	94	110	294	6	3,339	100	153,000	16,000		204,379	147,896	48,345	36	
New York.....	15	47	271	334	874	729	2,278	64	33,488	90,671	1,977,778	603,577	380	20,700	20,648	48,345	45	
North Carolina.....	12	27	72	104	330	846	1,491	86	6,500	3,000	376,500	3,000	180	20,700	20,648	25,100	42	
Ohio.....	10	29	104	133	181	331	812	99	16,000	3,600	561,134	132,830	26,274	49,138	23,736			
Oregon.....	1		11	13			132	0										
Pennsylvania.....	11	48	115	163	199	520	1,130	105	23,900	10,800	1,835,000			19,600	12,000	4,500	34	
South Carolina.....	4	9	33	42	163	415	693	42	1,400	1,500	91,000	1,000	80	8,500	3,700		8	
Tennessee.....	13	25	120	145	406	765	1,895	113	23,200	7,200	545,000	33,000	380	22,500	13,000		88	
Texas.....	4	13	30	61	266	198	733	21	3,400	3,750	171,000			12,500	5,000		11	
Vermont.....	1	4	5	9	23	83	129	9	1,500	100	80,000	20,000	1,200		1,200	3,000	3	
Virginia.....	14	42	79	136	330	722	1,379	83	6,930	4,550	403,000			35,185	21,000		31	
West Virginia.....	3	2	17	19	10	74	151	8	4,550	3,000	20,000			2,000			3	
Wisconsin.....	3	2	35	37	155	85	349	10	4,550		69,000			15,500		30	8	
Total.....	207	589	1,912	2,581	6,202	12,937	25,318	1,337	285,708	216,071	14,356,412	2,288,941	150,039	882,329	541,377	425,752	853	

DETAILED VIEW OF INSTITUTIONS FOR THE SUPERIOR INSTRUCTION OF WOMEN.

The detailed statistics relating to colleges and seminaries for women are presented in Table 44, Divisions A and B.

For the purpose of showing the status of these institutions more clearly than can be done by the tabulated statistics alone, additional information drawn from reports and other official statements, precedes each division of the table.

REMARKS ON TABLE 44, DIVISION A.

Table 44, Division A, includes a group of institutions whose admission requirements, standards of instruction, and general organization accord with those that have long been characteristic of colleges of liberal arts. Their work is essentially collegiate, in which respect they differ from the older seminaries for women, which, while making more or less provision for the distinctive studies of the college curriculum, are schools for general instruction.

The advantages of endowments, equipments, and teaching force concentrated upon the work of superior instruction, and of the associated efforts of a company of students thoroughly prepared for the pursuit of advanced studies, can not be questioned. The want of these conditions gave rise to the movement for the higher education of women that has swept through the leading nations of the world in the last twenty years, with results that have been productive of the highest good to individual students, and of deep and permanent advantage to society. The United States has been foremost in this movement; its example has been stimulating to other nations, and the history of what has here been accomplished, of the methods and the outcome of the various institutions which have arisen in response to the demand, is the constant subject of inquiry and study on the part of those who are interested in similar efforts in foreign countries.

The movement in the United States has resulted in opening to women the doors of many colleges which were originally limited to men, and in several special endowments for colleges for women.

The latter, which is in general the more costly experiment, has been confined so far to a few States. Between 1855 and 1868 five colleges for women were chartered in New York, two of these, viz, Rutgers College and Ingham University, having been incorporated originally as seminaries; the latter received a college charter in 1852 and the former in 1867. Massachusetts followed with Wellesley in 1870 and Smith College in 1871. The two latest additions to the group of institutions here considered bring into the movement new elements of power. Harvard Annex has solved a problem which has long engaged the attention of those seeking to secure for women the highest intellectual advantages. It brings within their reach all the rich provision accumulated in the oldest centre of intellectual life in our country, and furnishes a precedent soon undoubtedly to be followed by other universities.

Bryn Mawr, on the contrary, affords convincing evidence that the cause of woman's higher education will not be allowed to hang upon the chance of a liberal spirit in existing institutions, or to languish for lack of funds and plans and foundations.

In giving separate tabulation to the colleges in Division A of the table, the purpose has not been to indicate that their work differs essentially from that which is carried on elsewhere; the difference is in the conditions under which the work is maintained. One feature distinguishing these institutions from other seminaries for women is the definite classification of their students. This makes it easy to ascertain the extent of the demand made upon them for collegiate training.

The bearing of the statistics upon this point, it should be observed, can not be well understood without reference to the location of the colleges. They are grouped together in the North Atlantic Division of the United States, from whence the larger proportion of their students are drawn. With this consideration in mind it is interesting to note the statistics of instructors and students as reported for the successive years from 1877 to 1887, inclusive, in the college departments only:

Name of College.	Instructors.	Students.	Instructors.	Students.	Instructors.	Students.	Instructors.	Students.	Instructors.	Students.	Instructors.	Students.
	1877.		1878.		1879.		1880.		1881.		1882-83.	
Smith College, Northampton, Mass...	16	73	23	136	22	205	26	214	21	254	22	265
Wellesley College, Wellesley, Mass...	26	150	21	359	29	329	40	372	43	450	54	450
Wells College, Aurora, N. Y.	11	22	.....	25	9	18	14	22	14	27	14	50
Elmira College, Elmira, N. Y.	11	50	.....	.....	12	59	12	72	.....	68	13	71
Ingham University, Le Roy, N. Y.	16	47	18	44	.....	33	.....	35	17	44	16	55
Rutgers Female College, New York, N. Y.	.....	42	.....	35	11	32	7	23	7	32	11	37
Vassar College, Poughkeepsie, N. Y..	26	206	29	213	22	30	217	23	215	.....	.....	235

Name of College.	Instructors.	Students.	Instructors.	Students.	Instructors.	Students.	Instructors.	Students.	Instructors.	Students.
	1883-84.		1884-85.		1885-86.		1886-87.		1887-88.	
Smith College, Northampton, Mass.....	25	259	23	296	24	305	24	263	24	312
Wellesley College, Wellesley, Mass.....	72	502	74	515	61	520	74	590	77	628
Wells College, Aurora, N. Y.	13	46	15	38	.....	.....	.....	.....	.....	.....
Elmira College, Elmira, N. Y.	14	50	14	81	.....	.....	.....	.....	.....	.....
Ingham University, Le Roy, N. Y.	14	70	7	32	.....	.....	18	24	18	59
Vassar College, Poughkeepsie, N. Y.	33	238	.....	.....	21	186	33	a269	36	b227
Bryn Mawr College, Bryn Mawr, Pa. ....	.....	.....	.....	.....	14	36	18	63	19	81

a Includes 65 special students in music and painting.

b Includes 55 special students in music and painting.

THE HARVARD ANNEX, CAMBRIDGE, MASS.

The Society for the Collegiate Instruction of Women, popularly called "The Harvard Annex," has for its object to repeat for women the instruction given in Harvard College to men. The course leading to the Society's A. B. certificate is the same as that leading in the college to the A. B. degree,—the requirements for admission are the same, the identical papers (printed by the college) being used, and the papers used at semi-annual and final examinations in the college courses are used in the "Annex" for its corresponding courses. Instruction is given by the college teachers (and by no others) and the result of the work of the women is passed upon by the same persons. The college allows the women the free use of its extension library, and the "Annex" is called upon to provide but a few books of reference. The "Annex" has its own laboratories of zoölogy, botany, chemistry, and physics.

Students may enter for a four years' course or for partial or special courses. To meet the variety in the amount and kind of work, three different forms of certificate, to be signed by the instructors, are awarded. The highest, for the full college course, corresponds, as credentials for work done, to the A. B. degree; the second certifies to a liberal course of study during four years, in which other branches are accepted as equivalent for Latin or Greek, while a third is an annual certificate adapted to shorter terms of study.

The attendance for each year from 1879 to 1887-88, inclusive, with the distribution of the students, so far as reported, is as follows:

	1879-80.	1880-81.	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.
Total number of students.	42	47	38	41	49	55	73	90	.....
Studies:									
Greek.....	18	21	23	23	43	25	29	24	.....
Latin.....	15	17	16	22	27	31	34	53	.....
English.....	10	9	25	15	38	59	53	42	.....
German.....	10	11	14	14	18	16	30	25	.....
French.....	2	2	4	4	5	12	20	18	.....
Italian.....	2	2	1	0	0	.....	.....	4	.....
Philosophy.....	8	9	0	5	11	16	19	19	.....
Political economy.	1	1	0	0	0	9	6	7	.....
History.....	8	12	11	9	12	20	23	23	.....
Fine arts.....	.....	.....	1	.....	.....	.....	.....	5	.....
Music.....	.....	.....	.....	.....	3	.....	.....	3	.....
Astronomy.....	3	4	.....	4	0	.....	.....	3	.....
Mathematics.....	10	11	12	11	10	16	11	20	.....
Physics.....	4	5	3	8	5	6	6	20	.....
Chemistry.....	.....	.....	.....	.....	.....	.....	.....	5	.....
Physical geography.	.....	.....	.....	.....	.....	.....	.....	4	.....
Zoölogy.....	.....	.....	.....	.....	.....	4	2	14	.....
Advanced botany.	2	2	5	5	9	.....	6	5	.....
Sanskrit.....	.....	.....	.....	.....	1	.....	.....	.....	.....

Twenty-four States have been represented in the attendance upon the Annex during successive years. Massachusetts, as would naturally be expected, has furnished the majority of the students, the highest number coming from this State in any one year being sixty-seven. The State having the next highest representation in any one year was New York, which sent seven students in 1887. Minnesota and Maine have been represented in a single year by three students each, Connecticut, Michigan, and Ohio by two each. No other State has had at one time more than one representative. All the New England States, two Middle Atlantic, two South Atlantic, two South Central, ten North Central States, and California appear in the geographical list. The steady increase in the annual attendance and the ever extending area from which the patronage comes, show that the provision here made answers to a demand that is neither transitory nor local. The question very naturally arises why this demand should exist, and what is more should make itself urgently felt in view of the provision made for the higher education of women in colleges endowed exclusively for them. The answer is given so clearly in the reports of the Annex that we can not do better than quote from that source.

In his report for 1883 the secretary says: "Women seeking opportunities for the higher education naturally prefer to find them at an institution which is allied, at least, to one established and carried on for men, because they think that there they will be in the line of progress. They feel that on the perfecting of methods and the best application of educational forces the entire body of instructors in such an institution, as well as in all others like it, is united. Present them a course of instruction different from that offered to men, and they do not eye it askance because they think it not so good, but because it is probably just out of the line upon which progress and improvement are to be expected. This is one of the reasons why thoughtful women have less confidence in courses of instruction especially prepared for them than they have in that one upon which the wisdom of men has for generations been working and is still working.

"The society is encouraged by the experience of the past year, because (among other reasons) it has shown more clearly than ever before that there is not only a paramount educational usefulness in the instruction it has afforded, but also a money value in the different forms of certificates that it offers."

As to the classes of women with whom these considerations have weight, the reports are equally explicit.

The ladies of the executive committee, in their report for 1883, make the following statement: "Were every facility offered them, however, we hardly suppose that women would ever look upon a college course of study subsequent to their school life as an inevitable or even necessary part of their education; nor do I think it would seem to any of us desirable that they should do so. But this being granted, there still remain quite enough for whom such a completion of their earlier training is important in view of their occupation as teachers, and if there are others who ask it purely for its own sake, we surely should not deny them.

"With reference to the former class, we must remember that our interests are at one with theirs. The standard of our public and private schools can never be a matter of

indifference to parents, and that standard can hardly fail to be raised by the closer relation of the schools to the universities. Thus far our Annex students have belonged to the classes of women named above. They have been young women fitting as teachers, or older women who are already teachers, but who allow themselves, out of their small earnings, the rare luxury of a little change from teaching to learning, that they may go back to their work refreshed and better prepared; or women of scholarly tastes, with means to gratify them, who come, as I have said, to study under higher auspices simply because they enjoy it. We have had as yet no flighty students, brought by the novelty of the thing, and very little fragmentary, half-digested work."

The proportion of students attracted to the Annex from the simple desire of a high order of instruction increases somewhat, apparently, although the statistics upon this point are meagre, but the larger proportion of each year's attendance has been of students preparing for the teaching profession. The evidences are abundant that their opportunities for remunerative employment and their actual power as teachers and consequent satisfaction in the work are greatly increased by the training.

It was not until the sixth year of its operations, viz, 1885, that the Annex came into possession of a building. This greatly increased its advantages and its influence. The report for 1887 states: "In view of the increasing numbers, the society has secured additional lots adjoining its estate which nearly double its extent, and will allow for future additions, for gymnasium, laboratories, etc. In fact, one building on the newly acquired estate has already, by the liberality of friends, been transformed into a laboratory of chemistry, a convenience much-needed, and classes are actually at work in its cheerful apartments.

"The physical laboratory, situated in our main building, proved inadequate for the use of our classes last year, as was stated in the last Annual Report, and the executive committee determined to enlarge it. This has been inexpensively accomplished, and there is now twice as much available room as there was before. There is still great need of apparatus both for physics and chemistry, and the funds at the society's command are not sufficient to supply it."

Efforts to secure a permanent endowment fund were begun by the ladies of the executive committee in 1883. They have succeeded in raising a fund of \$70,000, and their efforts in this direction continue with unabated energy.

BRYN MAWR COLLEGE, BRYN MAWR, PA.

The tabulated statistics of Bryn Mawr College show a steady increase in attendance during the three years of its history, and the president reports that the entrance examinations for 1887-88 give evidence of a better preparation on the part of candidates than formerly. During the year the trustees have added three members to the faculty, as associates in English, mathematics, and history. A physical laboratory has also been erected and a department of physics added.

The curriculum is arranged on the group system, which is described as follows in the programme for 1887-88: "In all departments as yet organized there is a course of five hours a week for two years, called a major course. Whenever one year of this course is of such a nature that it can be taken separately it is marked as a minor course. It is required of every candidate for a degree to take two such major courses as shall be homogeneous, or shall complete each other, and major courses which fulfil this condition are designated as groups. It is meant that the student, under this system, should lay the foundations of a specialist's knowledge, and the required studies, namely, English, philosophy, and science, or history and science, are intended in part to supplement the group, and in part to insure a more liberal training than could be achieved did every student combine elective studies at pleasure.

"The two years' required course in English includes a general introduction into the study of language. English literature will be treated with steady reference to the comparative history of literature; and the entire course will be so planned as to give unity and domestic application to the pursuits of students of philology, and to acquaint students of science or of history, in so far as this is possible in a special course, with the results, scope, and methods of the study of language and literature. The required two years in science or in science and history permit the student of chemistry and biology to pursue both branches of the biological course, or to take a major course in physics; and they insure to the student of history and of language for one year at least the same kind of instruction and discipline as is received by the scientific student. The one year's course in philosophy is a general introduction into the study of the laws, conditions, and history of thought."

A tabular statement of the courses leading to a degree is here presented:

*Minor courses (one year each).**

1 and 2	3	4	5	[6]	[7]
English (two courses).	Philosophy.	Science, Physics, or Chemistry or Biology.	Science or History.	French, or German, or Greek.	Solid Geometry and Trigonometry.

* Except 7. (One-half year.)

Two major courses (two years each).

Constituting any one of the following groups:

1	2	3 *	4	5
Any Language with any Language.	Any Science* with any Science.	Mathematics with Greek or Latin.	Mathematics with Physics.	History with Political Science.

Free electives.

Five hours weekly for a year and a half.

The "minor courses" in the above table are known as the required studies; the "two major courses" as the group. All studies whatsoever fall under one of these heads: "required studies, group, or free electives."

The following statement from the president's report for 1886-87 shows the subjects chosen by the students for their major courses during 1885 and 1886:

"By forty-six students that entered in the years 1885 and 1886, the following major courses have been selected: Greek and Latin, 15; Greek and English, 1; Greek and mathematics, 4; Latin and English, 1; Latin and German, 1; English and French, 1; English and German, 3; German and French, 4; mathematics and physics, 1; history and political science, 5; chemistry and animal biology, 9; chemistry and vegetal biology, 1. Thus it appears that of twenty-six who chose two languages in combination, fifteen took the two ancient ones, eight took modern ones, and three combined an ancient and a modern language. The proportion selecting physics would doubtless have been larger had there been a department of physics during the first two years of the college."

Bryn Mawr College awards five fellowships annually, "one in Greek, one in English, one in mathematics, one in history, and one in biology. They are intended to be an indorsement of previous attainments and entitle the holder to free tuition, a furnished room in the college buildings, and the sum of \$350 yearly. They are open to graduates of Bryn Mawr College, or of any other college of good standing. No one may compete that has not a college degree or a certificate of prolonged study under well-known instructors; and, generally speaking, the fellowship will be given to the candidate that has studied longest or whose work affords the best promise of future success."

The Bryn Mawr European Fellowship is also awarded "annually to a graduate of Bryn Mawr College on the ground of excellence in scholarship. The holder receives the sum of \$500, applicable to the expenses of one year's study and residence at some foreign university, English or continental. The choice of a university may be determined by the holder's own preference, subject to the approval of the college."

ART SCHOOLS IN COLLEGES FOR WOMEN.

In both colleges and seminaries for women great attention is given to music and to the plastic arts. In general the provision for instruction in these branches is good, and in many cases it is of a very high order.

The universal recognition of these branches in a scheme of instruction for women is

not sufficiently explained by their mere value as social accomplishments, but is undoubtedly due in some measure to their essential value as instruments of culture. Moreover, it is evident that women are likely to have much more opportunity than is offered by the average lives of men for continued development in these directions. Hence, in giving prominence to art studies in the curriculum for women, the best provision is made for the maintenance of the artistic element as a part of human development.

The colleges which have arisen in response to the demand for higher scholastic privileges for women have not laid less stress than the older seminaries upon the department of æsthetics. Vassar, Smith, and Wellesley present a very full equipment in this respect.

SMITH COLLEGE, NORTHAMPTON, MASS.

SCHOOL OF MUSIC.

The aim of this school is to provide the best facilities for students who desire to pursue any branch of music, practical or theoretical. The school is located in Music Hall, which furnishes ample accommodations for practice, lectures, and public performances.

Candidates for admission to this school must be at least sixteen years of age, and furnish satisfactory evidence of having completed a course of study equivalent to that of a standard high school; and also Nos. 4 and 5 and either No. 1, No. 2, or No. 3 of the following courses of musical study:

(1) *Piano*: *a* Études for Technique; Czerny, Op. 740, first three books; Clementi's Gradus ad Parnassum, first book (or Cramer's Exercises, first two books). *b* Compositions; Mendelssohn's Songs without Words; Beethoven's Sonatas, Op. 2, No. 1; Op. 7; Op. 10, No. 1; Op. 14, No. 2.

(2) *Voice*: Concone's or Bordogni's Vocalises; Songs by Franz or Schubert.

(3) *Organ*: Stainer's Organ Method (or Buck's Exercises in Pedal Phrasing).

(4) *Notation*: The Theory of Rhythm and Tonality, Scales and Keys, Transposition and Modulation.

(5) *Harmony*: Principles of Four-part Composition, as far as the "Suspension," as given in Richter's Manual. Equivalents for these works will be accepted.

Students of music who desire to pursue studies in connection with the college classes will be allowed to do so on fulfilling the requirements for the admission of special students. Proficiency in music will, however, receive due consideration in the estimate of preparatory work, but will not be accepted as an equivalent for more than one of the courses required.

Students connected with the academic department or with the school of art are allowed to choose music as an elective study under the conditions which regulate the choice of other electives, provided that they devote to it not less than six hours a week of practice besides the work in harmony. In the arrangement of the studies, however, three hours of practice in music are considered the equivalent of one hour of regular recitation.

The regular course of study covers three years, and the degree of Bachelor of Music will be awarded to students who complete the course. To students who are not candidates for this degree, certificates specifying the amount and quality of the work done are given when they leave the school.

SCHOOL OF ART.

The aim of this school is to furnish practical and theoretical instruction in the principles of the arts of design,—drawing, painting, and sculpture, including the elements of architectural styles and decoration. The Hillyer Art Gallery offers rare advantages for the study of art. An endowment of fifty thousand dollars has been provided by bequest of Winthrop Hillyer for the perpetual increase of the art collection.

Requisites for Admission.—Students who desire to devote their time exclusively to the study of art will be admitted upon satisfying the president and the teachers of the school of their ability to do the work required. But candidates for admission who wish, in addition to their work in art, to take studies with the college classes, must be at least sixteen years of age, and furnish evidence that they have completed the courses of study required for the admission of special students.

Proficiency in art will, however, receive due consideration in the estimate of preparatory work, but will not be accepted as an equivalent for more than one of the courses required.

All members of the college are allowed to choose art as an elective study, under the conditions which regulate the choice of other electives, provided that they devote to it not less than six hours a week. In the arrangement of studies, three hours a week of practical work in art are considered the equivalent of one hour of regular recitation.

The regular course of study extends through four years, and diplomas will be awarded to students who complete it.

Instruction is first given in free-hand drawing from casts and artistic objects; afterward in drawing with crayon or charcoal from living models; students are then taught to draw from nature, with out-door practice.

Painting in oil or water-color, sculpture, and etching are begun as soon as the rudiments of art are sufficiently comprehended.

The principles of composition in painting, sculpture, and decoration are taught by lectures, and enforced by regular practice upon subjects assigned by the teacher.

Courses of lectures supplementary to the practical study of art are also given upon perspective, anatomy, artistic expression, and the history of painting and sculpture.

Students are not allowed to take advanced work until they satisfy the teachers of their ability to do so.

WELLESLEY COLLEGE, WELLESLEY, MASS.

Wellesley has received by bequest of the late *Isaac D. Farnsworth* funds for the erection of an art building, which will be ready for occupancy in September, 1889. Beside lecture-rooms, galleries for collections, and studios for those engaged in drawing and painting, a special feature in the plan of the building is the arrangement of small reading-rooms and libraries, so that the books and art material relating to particular subjects and periods can be made immediately available to general students.

The *School of Art* is already furnished with a collection of over three thousand photographs, engravings, etchings, and drawings; a series of stereoscopic views illustrating the history and art of different nations and periods; a collection of paintings in oil and water colors; copies of ancient armor; a ceramic collection; coins and pieces in bronze and iron; one hundred statues and busts, and a large collection of casts from the antique.

The following statements from the current catalogue show the general conditions under which art instruction is carried on in the colleges specified:

SCHOOL OF MUSIC.

The School of Music is located in Music Hall, which contains thirty-eight music-rooms and a hall for lectures and choral singing. Forty-three pianos and two large organs are furnished for the use of students. The organ presented by Mr. W. O. Grover has three manuals, each of sixty-one notes, a pedal of thirty notes, and twenty-six speaking registers. It contains 1,584 pipes.

Requirements for Admission.—Candidates must meet the general requirements for admission, and, unless accepted on certificate covering the following requirements, must pass satisfactory examinations in—

Mathematics, as required for the Freshman class.

Latin, as required for the Freshman class.

French and German may be substituted for Latin history, Greek and Roman (Smith and Merivale's).

Outline of English and United States history.

English literature. (Shaw's Manual, or an equivalent.)

English composition, as for the Freshman class.

Geography, as for the Freshman class.

Special students for any musical study will be received; but in all cases the above requirements must be met unless exceptional advancement in music can be urged as an equivalent for one required subject.

Courses of Study.—Three full courses are offered, each extending through five years; students at all times taking three studies, two lessons per week in each.

(1) Piano: Harmony and composition, and German or French.

(2) Organ: Harmony and composition, and German or French.

(3) Voice: Harmony and composition; two years Italian; three years German or French. Violin, viola, violoncello, harp, or any orchestral instrument may be made a specialty instead of the above-mentioned principal studies. Theory and *Æsthetics* and lectures on history of music, last year of each course weekly.

Students who complete either of these courses will receive the diploma of the School of Music, and if specially talented and deserving the degree of Mus. B.

The five years' classical or scientific and musical course.—Students entering the classical or scientific course may combine the regular study of music with the work required for a degree, the collegiate studies extending through five years instead of four.

Harmony and musical theory.—A thorough knowledge of the principles and practice of this branch of musical science is a prime necessity to every musical student. Without it no one can obtain clear and comprehensive views of the formation and character of musical composition. While it is not as yet a requisite for entrance to the School of Music the director urgently recommends that every member will at some period in her

course include harmony with her musical work. It is better that this should be continued for two years. All graduates must be able to pass a satisfactory examination in harmony and in the outlines of musical history.

Emery's Elements of Harmony. Richter's Manual (translated by J. C. D. Parker). Richter's Counterpoint (translated by Franklin Taylor). Richter's Fugue (translated by Arthur Foote). Wohlfahrt's Guide to Musical Composition.

Ensemble playing.—Facilities are offered for the study and practice of chamber music, the fantasies, romances, sonatas, and trios of the great masters for the piano and violin, with addition of violoncello and occasionally other instruments.

Analysis and interpretation.—Classes in analysis and interpretation of classical works will be formed by the director, in case it is desired by at least six students.

Concerts and lectures.—At frequent intervals recitals and concerts will be given by the advanced students in the several departments by members of the faculty of the School of Music and by distinguished musicians from Boston and elsewhere.

Lectures on theory and æsthetics and on the history of music and musicians are given throughout all the courses by the director and non-resident lecturers.

SCHOOL OF ART.

The purpose of the School of Art is twofold; while providing technical instruction in drawing and painting, it aims to supply such acquaintance with the arts in their history, philosophy, and criticism as may profitably supplement the work in other departments of study.

The course in technical training covers five years. The requirements for admission to it are the same as those for the School of Music. Students may enter an advanced class at any time by presenting satisfactory specimens of the work required in the previous years of the course.

The studies in the history and theory of art are counted among the regular college electives. Lectures upon these subjects are open without fee to all members of the college.

VASSAR COLLEGE, POUGHKEEPSIE, N. Y.

SCHOOLS OF PAINTING AND MUSIC.

The departments of painting and music, beside providing for the instruction of collegiate students, constitute schools for special instruction in these arts. The professors of these departments are the directors of the art schools, to whom, respectively, in connection with the president, the internal management of the schools is committed.

In the Junior and Senior years students who show marked proficiency in either of them, and whose general standing for scholarship is good, may, with the approval of the faculty, take one of these arts as an equivalent to a collegiate study; but in such a case harmony must be included with music. Two lessons a week in these arts are allowed to students in connection with their college studies, with a daily practice period.

Applicants for admission to either of the art schools as resident students must present testimonials of good character, and must be able to pass a satisfactory examination in such studies as may serve to grade them in their collegiate work. They must also give evidence of sufficient natural talent for the art in which instruction is to be given.

A full course of study in either department covers three years, but students who have already attained some degree of proficiency may finish the course in a shorter time.

Special courses adapted to the circumstances of the student may be arranged by the director, with the approval of the president; but no student is allowed to pursue a course of study that has not been sanctioned by the proper authorities.

Diplomas are awarded to those who have completed a full course and passed all its required examinations; to others certificates will be given on their leaving, stating what they have actually accomplished.

Vassar possesses a fine gallery of art, to which additions are constantly made from a special art fund.

TABLE 44.—DIVISION A.—*Statistics of Institutions for*

Location.	Name.	President.	Religious Denomination.	Date of Charter.
1	2	3	4	5
MASSACHUSETTS.				
1 Cambridge.....	Society for the Collegiate Education of Women.	Arthur Gilman, secretary....	Non-sect..	1882
2 Northampton.....	Smith College.....	L. Clark Seelye, D. D	Non-sect..	1871
3 Wellesley.....	Wellesley College.....	Helen A. Shafer, M. A	Non-sect..	1870
NEW YORK.				
4 Aurora*.....	Wells College.....	Edward S. Frisbee, D. D	Non-sect..	1868
5 Le Roy	Ingham University.....	Rev. W. W. Potheroh.....	Non-sect..	1852
6 Poughkeepsie	Vassar College.....	James M. Taylor, D. D.....	Non-sect..	1861
PENNSYLVANIA.				
7 Bryn Mawr.....	Bryn Mawr College.....	James E. Rhoads.....	Non-sect..	1880

* Statistics of 1886-87.

TABLE 44.—DIVISION A.—*Statistics of Institutions for*

Location.	Number of Years in College Course.	Number of Volumes in Library.	Amount of Matriculation Fee.	Amount of Graduation Fee.
2	26	27	28	29
MASSACHUSETTS.				
1 Society for the Collegiate Education of Women.....	4	2,214	\$75	.....
2 Smith College.....	4	5,000	.....	.....
3 Wellesley College.....	4	33,550	.....	.....
NEW YORK.				
4 Wells College*.....	.....	3,250	.....	.....
5 Ingham University	4	2,000	.....	.....
6 Vassar College.....	4	16,500	.....	\$5
PENNSYLVANIA.				
7 Bryn Mawr College.....	4	5,000	.....	.....

* Statistics of 1886-87.

the Superior Instruction of Women for 1887-88.—PART I.

Year of Opening.	Total Number of Instructors.	Total Number of Students.	Preparatory Department.		Collegiate Department.																Number of Degrees Conferred in Course in 1887-88.	Number of Endowed Professorships.	Number of Fellowships.	Number of Scholarships.	
					Professors and Instructors.			Students.																	
			Number of Instructors.	Number of Students.	Male.	Female.	Total.	Total Number.	Number in Degree Courses.	No. in A. B. Course.	No. in B. S. Course.	No. in B. L. Course.	No. in Ph. D. Course.	Number in Special or Partial Course.	Number of Degrees Conferred in Course in 1887-88.	Number of Endowed Professorships.	Number of Fellowships.	State.	Other.						
6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25						
1879	50	103	0	0	50	.....	50	103	.....	34	.....	.....	.....	69	8	.....	.....	.....	.....	.....
1875	24	312	0	0	11	13	24	312	.....	198	10	54	.....	52	54	.....	.....	.....	.....	.....
1875	77	628	0	0	7	70	77	628	.....	237	191	.....	.....	141	62	0	0	0	100	26		
1868	24	16	0	24	.....	.....	16	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1835	16	87	5	28	2	15	17	58	.....	16	.....	.....	.....	.....	.....	0	.....	0	0	0
1865	36	299	0	0	8	23	36	299	.....	36	.....	.....	.....	45	36	3	.....	.....	.....	.....	
1885	19	81	0	0	14	5	19	81	.....	70	.....	.....	3	8	2	.....	6	0	12	.....				

α Are those of Harvard College.

the Superior Instruction of Women for 1887-88.—PART II.

Annual Charge to Each Pupil for Tuition.	Cost of Board and Lodging per annum.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for Year from Productive Funds.	Amount of State or Municipal Aid Received within the Year.	Amount of Receipts for Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.
30	31	32	33	34	35	36	37	38	39
\$200	\$300	\$750	\$80,000	\$70,800	\$3,500	.....	\$12,000	\$15,500	.....
100	250	18,000	342,000	400,000	.....	.....	.....	.....	.....
100	200	10,000	2,000,000	285,000	25,445	.....	151,000	45,500	\$44,860
100	400	.....	282,150	200,000	9,250	.....	6,000	22,788	1,500
.....	200	400	83,000	.....	.....	.....	13,093	.....	13,000
(400)	.....	53,892	532,628	463,577	25,122	.....	.....	113,434	20,000
100	275	8,000	425,000	.....	.....	.....	8,100	.....	500

REMARKS ON TABLE 44, DIVISION B.

Table 44, Division B, presents the statistics of two hundred seminaries for women. Of these one hundred and thirty-seven report preparatory departments, with 6,202 students. This leaves 19,202 students, of whom 67 per cent. are known to be in collegiate departments; the distribution of the remainder is uncertain.

The majority of these seminaries are in possession of valuable buildings, as will be seen by reference to Column 24.

A few are well equipped with libraries and apparatus, though, as a rule, larger provision in these respects is desirable. Endowment funds are generally wanting, as will be seen by an examination of Column 25.

In their general arrangement the academic or collegiate departments of these seminaries show the influence of the colleges of their respective geographical sections. In the North they are generally divided into four classes, each corresponding to a year; in the South, on the contrary, the division is commonly into schools.

The curriculum is a more or less modified copy of the college curriculum, with large opportunity for electives and for partial or special courses. The adjustment of studies is the evidence of a double purpose in the seminaries. On the one hand they have endeavored to meet the general demand with respect to woman's education. On the other they have sought to maintain that higher ideal which would appropriate for women as well as for men the advantages of the kind of instruction and training approved by wise effort and long experience as the best for mental discipline and culture. When to this double purpose there is the added responsibility of preparatory work it is obvious that some part of the scheme must fail of satisfactory results. Under such circumstances a process of selection goes on quietly, perhaps, but none the less certainly, and in time makes itself felt in entirely new adjustments. Such a process has been going on in the seminaries for women throughout the country. Some have developed into colleges proper; others are gradually assuming the distinctive character of schools preparatory to college; while many, abandoning to the colleges the work which is their particular province, seek to make provision for that very large class of young women to whose wants the customary college training is not adapted. This separation of functions has been fully accomplished in but few localities, but will undoubtedly take place in others as colleges for women and colleges open alike to both sexes multiply.

In the absence of endowment funds the charges for board and tuition become the sources of support. Experience proves that this is not a condition favorable to the highest development of a scholastic work, but, on the other hand, it is conducive to a clear understanding of existing demands. In their recognition of these demands and the measures adopted for meeting the same, these seminaries have escaped the charge frequently made against the superior schools for men of having lost touch with the interests of actual life.

Sixty-four per cent. of the seminaries tabulated belong to some one of the religious denominations. This relation is sometimes merely a nominal one, and sometimes implies oversight and financial aid from the denomination. The relation has fostered a high order of moral training in the seminaries, and has done much to develop that zeal for charitable and missionary labors which characterize a large proportion of the educated women of the country.

Brief notices of a few endowed seminaries or of seminaries that had been the special objects of denominational care are appended to this general view. The selection has necessarily been limited to such as have furnished very full information to this Office. They are fairly illustrative of the entire number.

Judson Institute, at Marion, Ala., is one of the oldest seminaries for women in the country. It is the property of the Alabama State Convention, and its affairs are in the hands of a board of trustees appointed by that body. Its officers and teachers all receive stipulated salaries, so that they are freed from dependence upon the pecuniary profits arising from its management. Its scholastic standards have always been high, the full graduating course corresponding to that of the arts colleges. It has enjoyed a large patronage, and numbers above five hundred alumnae.

The institute is in possession of a fine property. The buildings, which have been recently enlarged and newly furnished, were unfortunately destroyed by fire November 24. The estimated loss is one hundred thousand dollars, one-fourth of which was covered by an insurance. Temporary provision was at once made for continuing the exercises of the school and steps taken for the immediate restoration of the building. It will be constructed on a much larger scale than the old building.

Wesleyan Female College, Macon, Ga., received a charter in 1836, authorizing it to confer degrees upon women. The charter of Oberlin preceded this by a few years, but the Wesleyan Female appears to have graduated women from its college course earlier than Oberlin.

The college has a deservedly high reputation, and numbers one thousand nine hundred and eighteen graduates. Its productive fund amounts to fifty thousand dollars. The grounds are extensive and attractive. The college building contains a gymnasium, a museum of natural history, an art gallery, and a library well supplied with choice literature and books of reference. In addition to the main structure is a building containing a chapel and recitation rooms. Several hundred dollars have been expended in the scientific department for securing the most approved apparatus for the illustration of chemistry, natural philosophy, and astronomy.

Silliman Collegiate Institute, Clinton, La., reports productive funds to the amount of twenty-seven thousand dollars.

The catalogue for 1887-88 furnishes the following particulars: "The school was established in 1852, chiefly through the benevolence of Mr. William Silliman. In 1866 he purchased the property and donated it with an endowment fund of twenty thousand dollars to the Presbytery of Louisiana. The conditions of the donation were that the Presbytery, through its agents and trustees in perpetual succession, should conduct said institution as a college for young ladies, to be kept free from all sectarian tenets and religious dogmas. 'The object of the donor being,' he said, 'to give to the public an institution of learning, where all denominations may send their children without interfering with the religious prejudices of any.'

"To this fund several thousand dollars have since been added, making this the wealthiest female college in the South-West, and thus enabling it to offer superior advantages, both in scope of curriculum and assistance to worthy pupils. The entire management of the institution is in the hands of a board of trustees, created by this Presbytery, irrespective of denominational tenets."

The large brick buildings, which were erected at a cost of thirty thousand dollars, present a handsome appearance; they are surrounded by attractive grounds embracing ten acres.

The laboratory is supplied with costly apparatus for philosophical and chemical experiments and the class-rooms are well furnished with maps, charts, and globes.

The annual interest from the Silliman Fund furnishes tuition to about thirty young ladies selected by the board of trustees from applicants the least able to bear the expense of education.

The *Dickinson Memorial Fund* was donated by the late Mrs. A. R. Dickinson, of Plaquemine, La. The interest of this fund is used for the tuition of the daughters of Presbyterian ministers.

The standards of scholarship have been materially advanced during the past four years.

Frederick Female Seminary, Frederick, Md., is one of the oldest incorporated institutions in the State.

In 1840 the State Legislature granted a full charter and gave authority to raise fifty thousand dollars for the purchase of grounds and the erection of suitable buildings.

The requisite funds having been secured, a building was erected and the seminary organized in 1843.

The original buildings were two in number, each fifty feet wide and ninety feet deep, with high basement and three stories.

During the present year extensive additions have been built and the grounds greatly improved. During the Civil War the work of the seminary was suspended for a time. With the return of peace it was reopened and has since been continued without interruption. The productive funds amount to \$24,000.

The seminary comprises a preparatory and collegiate department, the latter consisting of two courses, English and classical. Latin and Greek are included in the classical course, but for the latter French or German may be substituted. The number of graduates to date is two hundred and eighty-eight.

Of seven institutions for the Superior Education of Women in Massachusetts, tabulated in Division B, Table 44, four report productive funds.

Abbot Female Academy at Andover, chartered January 29, 1829, and opened May 6 of the same year, was the first academy incorporated for girls only in the State. Its records show a long list of benefactors, to whose fostering care the academy is indebted for its ample buildings with their admirable equipments as regards library, cabinets, apparatus, art collections, and gymnasium.

The curriculum is arranged in two courses; the English and Latin course covering four years, and the French and German course three years. Both courses give opportunity for electives. An efficient corps of teachers is always employed and high standards maintained. Ten scholarships have been founded in the academy. The amount of permanent productive funds reported is \$16,084. A building fund has also been accumulated during the last four years, which amounts now to \$36,523, of which \$5,847 were given during the current year.

Bradford Academy, founded in 1803 and chartered in 1804, is the oldest incorporated institution in the country to which women were admitted from the first. It was conducted as a school for both sexes until 1836, when the male department was closed.

It occupies a fine site, commanding views of the beautiful scenery of the Merrimack Valley. The building is spacious and supplied with all the appurtenances of a fine educational work. The grounds comprise above twenty-five acres, twelve of which are covered with a growth of oak and laid out with paths for exercise and recreation.

Great care has always been taken to secure superior teachers, and the records of the academy show the names of many who have achieved wide reputation. The regular academic course includes Latin and Greek, with French or German. The studies are so arranged that three are assigned for each term, the course being completed in four years. Special courses are provided for those who come for a less time.

The permanent productive funds amount to \$33,000.

The *Semi-Centennial of Mt. Holyoke Seminary* was celebrated with great enthusiasm and success June 22 and 23, 1887. The following particulars are derived from the volume containing the account of the proceedings:

Two semi-centennial days had been observed in 1886, viz, the granting of the seminary charter February 10 and the laying of the corner stone, October 3. Prior to 1836 but two schools for girls only had been chartered in the State, viz, *Ipswich Academy* in 1828 and *Abbot Academy* in 1829. The former had no endowment to secure its continued existence, and the latter was not designed exclusively to furnish the higher education, and for nearly forty years required no examinations for admission. The charter of *Mt. Holyoke Seminary* legalized the holding of funds gathered—though with great opposition and ridicule—to found a permanent institution, designed to do for young women what colleges for two hundred years had been doing for young men.

These funds were the voluntary gifts of benevolence and were all spent in building. In the entire lack of endowed departments, running expenses had been met for half a century from board and tuition fees; these were kept at the lowest figure practicable, that the seminary course might be "within reach of the class most likely to be benefited by it and to use it for the good of the world." In view of these facts, when the desire of making a jubilee gift to their *alma mater* was expressed in the annual meeting of the National Association of Holyoke Alumnae, June, 1885, the proposition to secure endowment for the chair of the principal met with a warm response, and it was resolved to raise for this purpose before June, 1887, the sum of twenty thousand dollars, to be called the Mary Lyon Fund. To devise means for the accomplishment of this purpose a committee was appointed of which Mrs. Helen French Gulliver was chairman.

Mrs. Gulliver's report, presented at the anniversary, showed that the fund had reached the sum of \$28,150 and was still increasing.

The work of the committee will be continued with the hope of raising an endowment adequate to the larger demands of the college organization upon which *Mt. Holyoke* has just entered in accordance with the act of the Legislature March 8, 1888. By this act the name is changed to *Mt. Holyoke Seminary and College*, and power is granted to confer "such honors, degrees, and diplomas as are granted or conferred by any university, college, or seminary of learning in the Commonwealth."

By reference to Column 25, Table 44, Division B, it will be seen that the productive fund has reached the sum of \$205,000.

The growth of the seminary is well illustrated by the increase of its teaching force in the fifty years of its history. In 1837 the faculty consisted of one principal, one associate principal, two teachers, and three assistant pupils, and, so far as appears from the catalogue, without any division of labor or distribution of departments. In 1887 there are over thirty teachers, each one of whom has her department of instruction and her especial work.

The roll of graduates numbers two thousand, which, with four thousand non-graduates, makes up a past membership of six thousand. Three-fourths of this number have been teachers; two hundred have been foreign missionaries; the alumnae records show that one thousand seven hundred and eighty-seven of the graduates have married.

In the review of the work of the seminary attention is called to the great number of institutions which have been founded by graduates of *Mt. Holyoke*, or organized upon the same plan.

In this connection the fact was noted that Mr. and Mrs. Durant gave some time to the special study of the workings of *Mt. Holyoke* when they were forming their plans for the foundation of Wellesley College. Sixty-one seminaries, academies, and high schools, all of excellent reputation, are enumerated whose principals or prominent teachers had been students of *Mt. Holyoke*.

The treasurer of the alumnae association submitted the following report for the fifteen years from 1862 to 1887:

"The cash receipts of the treasurer in these fifteen years amount to \$35,096, of which

\$23,350 belong to the Mary Lyon Fund; \$1,869 were given toward building and furnishing Williston Hall; \$1,104 for the mineralogical and geological cabinets; \$1,145 for the educational fund; \$365 from the Boston and Worcester Alumnae Associations for microscopes; \$500 in one donation for the green-house; \$500 in another for improvements in the seminary hall; \$500 were received from a legacy of Edie McKennan.

"Though the Tolman Fund of about four thousand dollars, the income of which is designed for the benefit of weary teachers, did not come into our treasury, it should be mentioned here.

"Besides these gifts of money, there have been numerous and valuable gifts from individuals and classes of which a grateful record is kept with names of donors. These have not only aided in filling the cabinets and art gallery of Williston Hall and furnishing its various departments, but have also contributed in many ways to the comfort and enjoyment of the household. The estimated value of gifts from classes alone is not less than four thousand dollars. Our missionary alumnae have kept us in constant remembrance by their gifts of rare and costly antiquities from various lands. The department of natural science has also been greatly enriched by contributions through the same channel."

The following description of buildings and equipments is from the catalogue of 1887-88:

"The grounds, comprising nearly seventy acres, slope to a stream which broadens into a pond. A driveway leads across this stream and ascends the hill, which bears the name of Goodnow Park, in honor of the donor, Hon. E. A. Goodnow, of Worcester. The pond, furnished with boats and boat-house, affords opportunities for rowing.

"The main edifice, which fronts west, has at each end a wing extending eastward; the extremities of the two wings are connected by the gymnasium, thus enclosing a quadrangle.

"Steam heat is supplied throughout, and an elevator gives easy access to the upper stories. Pure water is furnished in abundance from an artesian well four hundred and fifty feet deep.

"The library, a fire-proof building connected with the main edifice, has recently been enlarged. The new room is filled with cases compactly arranged so that twenty-five thousand volumes can be shelved within easy reach. The library is open fourteen hours a day; at present it contains twelve thousand volumes, selected with careful reference to the courses of study. There is a card catalogue and also a classified index. The reading-room, near by, is well supplied with newspapers and magazines."

The Lyman Williston Hall (finished in 1876) stands north-east of the other buildings, surrounded by a spacious lawn. It contains large and well-appointed rooms for lectures and recitations, extensive cabinets, a chemical laboratory for practical work, and valuable philosophical apparatus.

The art gallery occupies the entire upper floor of this building, including a large central apartment with several adjacent rooms.

An astronomical observatory was completed in June, 1881. It contains a fine telescope with an eight-inch object glass, also a meridian circle, astronomical clock, chronograph, sextant, spectroscope, and other appliances. This building, with its equipments, as well as the lot on which it stands, is the gift of A. L. Williston, Esq., of Northampton, in memory of his son, John Payson Williston.

In assuming the special function of a college it is not proposed to interfere at all with the work of the seminary. The distinction between the two as regards admission requirements and curriculum illustrate very clearly the differences in general between seminaries and colleges for women.

For this reason an outline of both works is here presented.

Admission requirements to Seminary.—*Mathematics.*—Mental and written arithmetic, including the metric system of weights and measures; Olney's Complete School Algebra (an elementary work is not sufficient); plane geometry.

In order that a requisite mathematical discipline may be gained, it is desirable that there be a familiar acquaintance with two or three authors in higher arithmetic. A careful review of mental arithmetic is also important.

Latin.—Latin grammar, Jones's Latin Prose Composition, Caesar's Gallic Wars, four books, or an equivalent amount of Cornelius Nepos, or Sallust; Cicero, seven orations. A thorough acquaintance with the principles of syntax is required. The English system of pronunciation is preferred.

English.—Knowledge of principles as given in *How to Write Clearly*, by E. A. Abbott, or in *Welsh's Essentials of English*; correction of errors in syntax, and an essay on an assigned subject.

Geography; also Guyot's Physical Geography, Parts II and III, or an equivalent. History of the United States.

Although well-qualified candidates may be admitted to the entering class at sixteen years of age, it is better that all should be seventeen or eighteen. None should enter the Senior class under twenty.

The prescribed studies of the seminary course are as follows: Latin; Ancient and Mediæval Literature; French or German¹; English Literature; Rhetoric and Philology; Logic; Mathematics. The required course includes plane, solid, and spherical geometry, algebra, and plane and spherical trigonometry. Physics; Astronomy; Chemistry; Mineralogy, Lithology, and Geology; Physiology and Hygiene; Zoölogy; Biology; Botany; History. Two courses, one in ancient and the other in mediæval and modern history, are required. Civil Government; Mental and Moral Science; Theism and Christian Evidences; History of Art.

Course of Study.—The prescribed curriculum is arranged to occupy four years. It is the aim of the course to give a solid and well-balanced education in those things which are fundamental, at the same time encouraging and providing for further study in whatever department it may be desired. The special courses arranged in French, German, and Greek, as well as in some of the sciences, are additional to the regular curriculum.

The college curriculum is substantially the same as that of other arts colleges. It presents a higher range of the seminary studies. Greek appears among the prescribed subjects, and large provision is made by electives for special courses in the modern languages, Ancient and Modern Literatures, Physical Science, Psychology, Ethics, Philosophy, Æsthetics, Political Economy, and International Law.

In accordance with the time-honored traditions of Mt. Holyoke the new department makes special provision for the study of the Bible and of Theism and Christian Evidences.

Greek is omitted from the scientific course, and Latin is pursued but two years; the first as a prescribed and the second as an elective study.

The college courses, classical or scientific, occupy four years.

The Industrial Institute and College for White Girls, Columbus, Miss., derives its entire income from State appropriations.

In his report to this Office for the current year the president says: "This institution was established by the State of Mississippi by act of Legislature, approved March 12, 1884. First session opened October, 1885. Its design is to afford white girls of Mississippi opportunity for education in the arts and sciences, training in music, fine arts, and industrial arts. Its success, as attested by popular favor and the record of its pupils now engaged in teaching in academic and industrial schools, as well as by the number of pupils earning good salaries in telegraphy, phonography, book-keeping, decorative art, and other lines of profitable employment for which they were prepared here during the first three sessions, is already beyond the hopes of its most earnest advocates and inaugurators."

Lindenwood College, St. Charles, Mo., was opened as a private school in 1830. In 1854 it was chartered as a college in view of liberal gifts for its establishment, made by two citizens, Maj. George C. Sibley and S. S. Watson, Esq. In 1870 it was placed under the control of the Presbyterian Synod of Missouri.

The college buildings were erected expressly for the purposes they serve. They are surrounded by spacious and beautiful grounds which afford fine facility for exercise.

The endeavor was early made to secure an endowment fund for the institution in order that the various departments might be freed from dependence upon tuition fees. The efforts were so far successful that in 1871 upwards of forty thousand dollars had been secured. This, however, appears not to have been invested as a permanent fund, and the catalogue of 1885-86 stated that the college had no endowment. The next year (1887) a fund of twelve thousand dollars was reported, of which ten thousand appeared to be a recent gift. Renewed efforts are being made to raise the endowment to a sum commensurate with the high purposes of the college, and also to increase the provision for laboratory practice. The course of the college department is an extensive one, covering four years. Only those who complete the same receive the college diploma.

The Greensborough Female College, Greensborough, N. C., reports a small productive fund, amounting to three thousand dollars.

The following particulars of its history and equipment are from the catalogues for 1881-82 and 1885-86:

The college was founded by the North Carolina Conference and chartered in 1838, being the first incorporated college for women in the State. It was opened for students in 1846 and continued in successful operation until its destruction by fire in 1863. It was reopened in 1873, and in 1881 was bought by a number of citizens living in different parts of the State.

¹Greek may be substituted.

The college building is located near the western limits of Greensborough, in the centre of a campus embracing forty acres, a large portion of which is finely shaded. It is very large, commodious, and well adapted to school purposes, containing a capacious chapel and dining-room, study hall, lecture, recitation and music rooms, parlors, an art studio, and dormitories sufficient to accommodate two hundred boarders.

The authorities of the college have recently appropriated one thousand dollars for the purpose of purchasing books and adding to the chemical and philosophical apparatus.

The patronage of the college is chiefly Methodist, although other denominations are represented.

Candidates for a full diploma must pass the required examination in the regular English course and in one ancient or modern language. Many of the graduates and former students of the college fill responsible places as teachers. The two past years have been the most prosperous ones in its history.

Four seminaries for women in Ohio report productive funds as follows: *The Shepardson College, Granville*, \$65,000; *Hillsborough Female College*, \$6,000; *Western Female Seminary, Oxford*, \$29,500; *Lake Erie Female Seminary, Painesville*, \$32,300.

The Shepardson College sustains co-operative relations with Denison University, although there is no organic union between the two. The relation secures to the college the benefit of the libraries and laboratories of the University.

The Western Female Seminary has received during the current year three gifts of money, amounting to sixteen thousand dollars, for a new building for scientific purposes.

The catalogue of Lake Erie Female Seminary for 1887-88 furnishes the following particulars: The seminary is an outgrowth of the educational work of Mary Lyon. In 1847 a school for girls taught by graduates of Mt. Holyoke Seminary was established at Willoughby, Ohio, but after several years' successful work the building was destroyed by fire. A question then arose as to the permanent location of a school which should be more completely upon the Mt. Holyoke plan.

Liberal offers were made by the citizens of Painesville which were accepted, and in 1856 Lake Erie Female Seminary was incorporated under the general statutes of Ohio. It was opened in September, 1859, most of the teachers being graduates or former teachers of Mt. Holyoke Seminary.

The seminary offers a course of study more extensive than that of most high schools, especially adapted to the needs of women, prominence being given to history, art, and literature, while it furnishes thorough drill in languages and mathematics and gives a large place to natural sciences. The seminary is not a preparatory school to any college, but special students may pursue its courses in mathematics and the languages embracing more than is required for entrance to college, while the completed seminary course, by its breadth and thoroughness, lays the foundation for advanced special training according to university methods. The seminary course gives time for the use of the library, for essay writing, music, training in household duties, and other means of culture necessary for the complete development of woman, whether the student is to enter a profession or take her place in a home. The seminary is to its students not only a school, but a safe and pleasant home, with regular hours for sleep, exercise, and study, together with the helpful influence of a large number of resident teachers, and the companionship of young ladies of kindred tastes from different parts of the country.

While the religious teaching is unsectarian, it is the constant aim to develop character founded upon Christian principle, and to prepare for duties of Christian womanhood. The seminary illustrates the principles of Christian union in its board of trustees, its teachers, and its religious life and instruction. Six missionary societies are sustained, representing as many branches of the church, and contributing to their separate treasures; but the members of the seminary unite in Bible study, daily worship, and in the study of all movements, religious and philanthropic, for the good of the world. The location of the seminary, half a mile west of the business centre of the town, is pleasant and healthful. The grounds comprise fourteen acres, including a fine grove, and furnish abundant opportunity for exercise and recreation. The main building contains, beside eighty rooms for teachers and students, a chapel, used also for public exercises, a reception room and drawing room, a reading room, well supplied with periodicals, and open free of charge; a well selected library; a large studio for classes in drawing and painting; lecture and recitation rooms, and a gymnasium. The wing contains, in the basement, six music rooms and a laboratory for practical work in chemistry. All the teachers and students board in the seminary, and the assignment of rooms is made by the principals with regard to health and the general good. No day scholars are admitted. This is for the sake of carrying on the school work with less interruption, and especially on account of the domestic system, which admits of no privileged class, exempt from the common duties and responsibilities of the one family.

The ordinary daily housework, thoroughly systemized and lightened by many appliances for lifting weights and saving steps, is performed by the students, under the superintendence of the teachers. The time thus occupied, one hour daily, is so arranged as not to interfere with the hours of study. The economy of this arrangement was, at first, the chief consideration in the founding of Mt. Holyoke Seminary, but there are other and stronger reasons in its favor. It gives healthful exercise, cultivates a taste for home occupations, honors labor, and makes the institution not only less expensive, but more independent than it could be with the number of servants that would otherwise be required. The student sees what system, co-operation, and prompt action can do; and in time she finds herself able not only to take responsibility but to enjoy it. And thus, in future years, she will bear her part among the workers of the world with greater ease and success.

Candidates for entrance must be sixteen years of age and in good health. For admission to the regular course they are examined in—

English.—Grammar, Composition, and Rhetoric, with selected works from standard authors.

Latin.—Daniel and Collar's Beginner's Book, Jones's Prose Composition, Caesar's Gallic War, four books; Cicero, four orations.

Mathematics.—Arithmetic, through cube root, and Olney's Complete Algebra.

Physical Geography.

History.—History of the United States, Bible History, the Life of Christ.

Science.—Elements of Physiology and Hygiene.

The permanent funds, as will be seen by reference to Table 44, Column 25, amount to \$32,300.

Most of the contributions to the school have come from citizens of Painesville and Northern Ohio, but the seminary is not local in character or design. Pupils have come from twenty-six States in the Union. Many of its graduates are settled in the far West, and some are teachers in foreign lands.

If the present low rates of board and tuition are to be maintained, the seminary must rely upon the friends of education for the funds necessary to equip it completely for the increasing demands of liberal culture. There should be a permanent fund for sustaining and enlarging the departments of instruction, and for making additions to the library and apparatus, and to the natural science collections.

The Nashville College for Young Ladies, Nashville, Tenn., was opened as a private enterprise in 1880, and the following year passed into the hands of a board of trustees.

The first care of the board was the purchase of a site and the erection of a commodious and substantial building. To meet the demands occasioned by the rapid growth of the institution additional grounds were soon after purchased, by which ample space has been secured.

The arrangement and furnishing of the building show due regard to the health and comfort of students.

For scientific instruction the college is allowed access to the splendid outfit of the Vanderbilt University, which having been purchased under the personal supervision of the chancellor and the professor of chemistry in London, Paris, Berlin, and New York, is of the finest kind and of the amplest variety.

Pupils belonging to advanced classes of this institution are permitted, in company with a teacher and under proper regulations, to attend the lectures of the Vanderbilt University and to enjoy the benefits of the museum, cabinets, library, and apparatus of the same. No attempt at co-education is designed. The young ladies are taught and drilled in the texts covering the ground of instruction by their own teachers, in the class-rooms of the college. Those who attend upon lectures under this arrangement are required to take notes of the subjects discussed, to prepare recitations, and to pass written examinations before their own teachers upon the topics thus studied. By this arrangement the ample resources of the university are brought within reach of such young ladies as are properly prepared to profit by them.

In order to enter the regular collegiate course of the institution pupils are required to pass approved examinations upon the following subjects or their equivalents: Geography, arithmetic, grammar, algebra to equations, history of the United States, history of England, elementary botany, elementary physics, composition, word analysis, and spelling.

To enter the Department of Languages they must present: (1) in Latin—grammar, elementary composition, Caesar's *De Bello Gallico* (four books), and Sallust's *Cataline*; (2) in French or German—elementary grammar, pronunciation, and reading. For entrance into advanced collegiate classes the pupils must pass examinations upon the above with the topics of the intervening grades.

The Vermont Methodist Seminary and Female College was founded in 1834. The trustees are authorized and empowered to establish and confer on female pupils whom

they shall deem worthy thereof and who shall have completed the regular course of study prescribed in said college, all such literary honors and degrees as are usually conferred by the best academies, seminaries, or female colleges.

The curriculum is arranged in seven courses, as follows:

1. *Modern*, three years.
2. *Music*, three years.
3. *Art*, three years.
4. *College Preparatory*, four years.
5. *Latin Scientific College Preparatory*, four years.
6. *Latin Scientific*, four years.
7. *Collegiate*, four years.

An efficient corps of teachers is employed and high standards are maintained.

The amount of productive funds reported is twenty thousand dollars.

TABLE 44.—DIVISION B.—*Statistics of Institutions for*

	Location.	Name.	Principal.
	1	2	3
	ALABAMA.		
1	Athens*	Athens Female College.....	Rev. M. G. Williams.....
2	Eufaula.....	Union Female College.....	A. H. Todd.....
3	Huntsville.....	Huntsville Female College.....	A. B. Jones, D. D., LL. D.....
4	Huntsville.....	Huntsville Female Seminary.....	J. D. Anderson, A. M.....
5	Marion.....	Judson Female Institute.....	Sam. W. Averett.....
6	Marion.....	Marion Female Seminary.....	Jas. D. Wade.....
7	Talladega a.....	Synodical Female Institute.....	Rev. G. W. Maxson, D. D.....
8	Tuskaloosa.....	Central Female College.....	S. B. Foster, A. M.....
9	Tuskaloosa.....	Tuskaloosa Female College.....	Alonzo Hill, A. M.....
10	Tuskegee.....	Alabama Conference Female College.	John Massey, LL. D.....
	CALIFORNIA.		
11	Los Angeles.....	The Ellis College.....	Henry Ludlam.....
12	Mills Seminary.....	Mills College.....	C. C. Stratton, D. D.....
13	Santa Rosa.....	Santa Rosa Ladies' College.....	Rev. W. A. Finley, A. M., D. D.....
	CONNECTICUT.		
14	Hartford (40 Pratt St.)...	Hartford Female Seminary.....	M. Louise Bacon.....
	GEORGIA.		
15	Athens.....	Lucy Cobb Institute.....	Miss M. Rutherford.....
16	Covington.....	Georgia Methodist Female College..	Rev. John T. McLaughlin, A. M.
17	Cuthbert.....	Andrew Female College.....	Howard W. Key.....
18	Dalton.....	Dalton Female College.....	Jno. A. Jones, A. M.....
19	Forsyth.....	Monroe Female College.....	Richard T. Asbury, A. M.....
20	Gainesville a.....	Georgia Baptist Seminary for Young Ladies.	A. W. Van Hoose.....
21	Griffin.....	Griffin Female College.....	Rev. C. V. Waugh.....
22	La Grange.....	La Grange Female College.....	Rufus W. Smith, A. M.....
23	La Grange.....	Southern Female College.....	Charles C. Cox.....
24	Macon.....	Wesleyan Female College.....	Rev. W. C. Bass, D. D.....
25	Newnan a.....	College Temple.....	M. P. Kellogg, A. M.....
26	Rome*	Shorter College.....	L. R. Gwaltney.....
27	Thomasville.....	Young Female College.....	John E. Baker, A. M.....
	ILLINOIS.		
28	Chicago (485 W. Taylor St)	Seminary of the Sacred Heart.....	Madame H. Spalding.....
29	Greenville.....	Almira College.....	James P. Slade.....
30	Jacksonville.....	Illinois Female College.....	W. F. Short, D. D.....
31	Jacksonville.....	Jacksonville Female Academy.....	E. F. Bullard, A. M.....
32	Knoxville.....	St. Mary's School.....	Rev. C. W. Leflingwell, D. D.....
33	Morgan Park.....	Chicago Female College.....	Gilbert Thayer, D. D.....
34	Mt. Carroll.....	Mt. Carroll Seminary.....	Mrs. F. A. W. Shimer.....
35	Rockford.....	Rockford Seminary.....	Miss Anna B. Gelston.....
	INDIANA.		
36	New Albany a.....	De Pauw College for Young Women.	Rev. L. M. Albright.....
	IOWA.		
37	Davenport a.....	Immaculate Conception Academy ..	Sister Mary Gonzaga.....
38	Des Moines a.....	Callanan College.....	C. R. Pomeroy, D. D.....
	KANSAS.		
39	Oswego.....	College for Young Ladies.....	Miss Susan H. Johnson.....
40	Topeka.....	College of the Sisters of Bethany.....	Thomas H. Vail.....

* Statistics of 1886-87.

a Statistics of 1885-86.

the Superior Instruction of Women for 1887-88.—PART I.

Date of Charter.	Date of Opening.	Religious Denomination.	Professors and Instructors.			Students.				Authorized by Law to Confer Degrees.	Number of Degrees Conferred in Course in 1887-88.	Number of Scholarships.		Number of Graduates, 1887-88.
			Male.	Female.	Total.	Number in Preparatory Department.	Number in Collegiate Department.	Number of Resident Graduates.	Total Number of Students Enrolled.			State.	Other.	
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1843	1843	M. E. So.....	1	4	5	50	40	.....	90	.....	7	.....	.....	7
1852	1853	Non-sect.....	1	3	4	21	45	.....	68	Yes.....	2	.....	.....	2
1850	1843	M. E. So.....	1	14	15	56	173	6	235	Yes.....	32	0	0	32
1840	.....	Presb.....	1	4	5	20	40	.....	75	Yes.....	1	.....	.....	1
1841	1839	Baptist.....	2	11	13	36	88	1	134	Yes.....	15	0	0	15
1836	.....	Non-sect.....	1	6	7	.....	.....	4	91	Yes.....	6	.....	.....	6
1840	1841	Presb.....	2	4	6	75	71	.....	146	.....	.....	.....	.....	3
1857	1857	Baptist.....	2	8	10	50	75	.....	125	.....	4	0	0	4
1860	1860	Non-sect.....	1	8	9	.....	.....	.....	235	.....	.....	.....	.....	12
1855	1856	Meth.....	2	7	9	.....	.....	.....	156	Yes.....	36	.....	.....	10
1885	.....	Non-sect.....	3	7	10	.....	.....	.....	81	.....	.....	.....	.....	11
1876	1871	Non-sect.....	5	19	24	83	145	4	229	Yes.....	0	.....	10	16
.....	1884	.....	2	4	6	.....	.....	.....	41	.....	.....	.....	.....	13
1861	1861	Non-sect.....	1	5	6	20	50	.....	70	.....	.....	.....	.....	3
1838	1859	.....	5	14	19	15	79	.....	130	Yes.....	.....	.....	.....	27
1860	1850	Meth.....	3	4	7	40	97	.....	137	Yes.....	5	0	0	5
1853	1854	Meth.....	3	5	8	35	90	.....	.....	Yes.....	8	.....	1	9
.....	1872	M. E. So.....	2	7	9	.....	.....	.....	181	.....	.....	.....	.....	5
1849	1850	Baptist.....	3	4	7	46	70	.....	116	.....	.....	0	.....	6
1878	1878	Baptist.....	1	4	5	30	50	.....	80	.....	.....	.....	.....	19
1848	.....	.....	1	3	4	20	60	0	80	Yes.....	1	0	0	1
1846	1838	M. E. So.....	4	7	11	49	126	.....	175	Yes.....	24	0	0	24
1843	.....	Baptist.....	6	14	20	.....	.....	16	182	Yes.....	.....	0	0	26
1836	1839	M. E. So.....	6	13	19	23	293	.....	325	Yes.....	.....	0	6	60
1853	1853	Non-sect.....	2	8	10	30	100	.....	130	.....	.....	.....	.....	25
1877	1873	Baptist.....	3	12	15	.....	.....	.....	163	Yes.....	9	.....	.....	26
1868	1869	Non-sect.....	1	3	4	26	69	.....	95	Yes.....	9	.....	.....	9
1870	1858	R. C.....	1	18	19	23	90	7	120	No.....	0	0	0	3
1857	1855	Non-sect.....	1	9	10	12	50	.....	62	.....	.....	.....	.....	29
1847	1847	M. E.....	5	10	15	100	95	5	260	Yes.....	16	0	0	15
1835	1830	Non-sect.....	1	10	11	.....	133	.....	.....	.....	.....	.....	.....	31
1882	1868	P. E.....	4	9	13	63	60	0	123	Yes.....	12	0	0	12
1873	1873	Non-sect.....	6	7	13	8	42	1	63	.....	.....	.....	.....	9
1852	1853	Baptist.....	1	10	11	.....	.....	.....	125	Yes.....	.....	.....	.....	13
1847	1849	Non-sect.....	1	18	19	.....	.....	.....	160	Yes.....	.....	.....	.....	35
1852	1852	Meth.....	.....	.....	5	.....	.....	.....	33	.....	.....	.....	.....	36
1869	1859	R. C.....	.....	17	17	126	64	.....	190	Yes.....	5	.....	.....	37
1890	1879	Non-sect.....	3	10	13	59	85	.....	144	.....	.....	.....	.....	38
1833	1886	Presb.....	.....	9	9	14	30	32	71	Yes.....	.....	.....	.....	39
1870	1872	P. E.....	7	23	30	148	84	1	227	Yes.....	0	0	0	40

TABLE 44.—DIVISION B.—Statistics of Institutions for

	Location.	Name.	Principal.
	1	2	3
	KENTUCKY.		
41	Danville	Caldwell College	Miss Lottie A. Campbell.....
42	Georgetown	Georgetown Female Seminary.....	James J. Rucker, LL. D.....
43	Glasgow	Liberty Female College	T. Simpson McCall.....
44	Harrodsburg	Daughters' College	Jno. Aug. Williams
45	Hopkinsville	Bethel Female College	J. W. Rust, A. M., LL. D
46	Lexington	Hamilton Female College	J. T. Patterson.....
47	Lexington	St. Catharine's Female Academy.....	Sister Servant.....
48	Lexington*	Sayre Female Institute.....	H. B. McClellan.....
49	Louisville	Hampton College.....	L. D. Hampton.....
50	Louisville a	Louisville Female College	Thomas D. Davidson.....
51	Millersburg	Millersburg Female College.....	Cadesman Pope.....
52	Mt. Sterling	Mt. Sterling Female College.....	J. P. Marshall.....
53	Nicholasville	Jessamine Female Institute.....	Miss M. F. Hewitt.....
54	Pewee Valley.....	Kentucky College for Young Ladies	Rev. Erastus Rowley, D. D
55	Russellville*	Logan Female College	H. K. Taylor.....
56	Shelbyville	Science Hill School.....	W. T. Poynter, D. D.....
57	Shelbyville	Stuart's Female College.....	W. H. Stuart.....
58	Stanford	Stanford Female College.....	Alex. S. Paxton, A. B.....
59	Woodburn.....	Cedar Bluff Female College.....	Rev. B. F. Cabell.....
	LOUISIANA.		
60	Clinton	Silliman Female Collegiate Institute.....	Geo. J. Ramsey, A. M.....
61	Mansfield*	Mansfield Female College.....	Rev. Francis M. Grace, A. M., D. D.....
62	Minden	Minden Female College.....	Maj. A. L. Cox, A. M.....
	MAINE.		
63	Deering.....	Westbrook Seminary and Female College	J. P. Weston.....
64	Kent's Hill	Maine Wesleyan Seminary and Fe- male College	Rev. Edgar M. Smith, A. M. ..
	MARYLAND.		
65	Baltimore (Park Ave.) ..	Baltimore Academy of the Visita- tion	Mother Mary Paula Combs ..
66	Baltimore (Park Place)..	Baltimore Female College	N. C. Brooks
67	Cambridge	Cambridge Female Seminary	J. F. Baugher, A. M.....
68	Frederick	Frederick Female Seminary	W. H. Purnell, LL. D.....
69	Lutherville	Lutherville Seminary	J. H. Turner
	MASSACHUSETTS.		
70	Andover	Abbot Academy	W. F. Draper.....
71	Auburndale	Lasell Seminary for Young Women.....	C. C. Bragdon
72	Boston (69 Chester Sq.) ..	Gannett Institute	Geo. Gannett.....
73	Bradford	Bradford Academy	Annie E. Johnson
74	Norton	Wheaton Female Seminary	A. Emerson
75	South Hadley	Mt. Holyoke College	Elizabeth Blanchard
	MICHIGAN.		
76	Kalamazoo.....	Michigan Female Seminary.....	Isabella G. French, A. B.....
	MINNESOTA.		
77	Albert Lea	Albert Lea College	Rev. R. H. Abbott, D. D.....
78	Fairbault	St. Mary's Hall	Miss Ella F. Lawrence.....
79	Minneapolis.....	Bennet Seminary.....	Miss E. E. Kenyon.....

* Statistics of 1886-87.

a Statistics of 1885-86.

the Superior Instruction of Women for 1887-88.—PART I—Continued.

Date of Charter.	Date of Opening.	Religious Denomination.	Professors and Instructors.			Students.				Authorized by Law to Confer Degrees.	Number of Degrees Conferred in Course in 1887-88.	Number of Scholarships.		Number of Graduates, 1887-88.	
			Male.	Female.	Total.	Number in Preparatory Department.	Number in Collegiate Department.	Number of Resident Graduates.	Total Number of Students Enrolled.			State.	Other.		
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
1877	1861	Presb.....	1	12	13	35	94	4	133	.....	0	0	1	5	41
1829	1846	Baptist.....	3	7	10	23	95	2	123	Yes.....	.....	.....	.....	4	42
1873	1874	Baptist.....	1	5	6	50	57	.....	107	Yes.....	7	.....	.....	7	43
1846	1856	Non-sect.....	2	7	9	25	100	.....	140	.....	.....	0	1	12	44
1854	1856	Baptist.....	1	5	6	10	40	.....	75	Yes.....	.....	.....	.....	2	45
1869	1869	Christian.....	8	7	15	.....	164	0	184	Yes.....	11	0	0	11	46
.....	.....	R. C.....	.....	7	7	50	30	.....	121	.....	.....	.....	.....	11	47
1856	1854	Presb.....	2	10	12	.....	.....	.....	100	Yes.....	14	.....	.....	.....	48
1873	1873	Non-sect.....	2	12	14	80	100	10	.....	Yes.....	.....	.....	.....	20	49
1884	1881	.....	3	7	10	.....	.....	.....	50	.....	.....	.....	.....	50	50
1851	1851	M. E. So.....	2	14	16	95	102	.....	197	Yes.....	8	.....	8	51	51
1876	.....	Non-sect.....	1	3	4	15	30	.....	47	Yes.....	0	.....	0	0	52
1861	1852	Non-sect.....	1	8	9	34	97	.....	131	Yes.....	15	.....	1	15	53
1876	1873	Non-sect.....	1	5	6	9	32	.....	41	Yes.....	.....	.....	.....	2	54
1867	1867	Meth. So.....	2	7	9	.....	.....	.....	140	Yes.....	10	.....	.....	10	55
1879	1825	M. E. So.....	1	9	10	97	52	0	152	Yes.....	.....	0	0	3	56
1849	1839	Presb.....	1	6	7	40	43	0	91	Yes.....	5	0	0	5	57
1863	1863	Non-sect.....	1	4	5	25	60	0	.....	Yes.....	3	0	0	3	58
1864	1862	Non-sect.....	3	6	9	8	72	.....	80	Yes.....	7	.....	.....	7	59
1852	1852	Presb.....	2	6	8	45	66	0	111	Yes.....	0	0	30	0	60
1855	1855	M. E. So.....	3	5	8	30	60	.....	90	.....	.....	.....	.....	.....	61
1850	1850	Non-sect.....	1	3	4	20	60	.....	80	Yes.....	2	12	0	2	62
1831	1834	Univr.....	3	3	6	22	60	25	150	Yes.....	4	.....	2	15	63
1821	1821	M. E.....	12	7	19	58	170	.....	286	Yes.....	11	5	0	41	64
1833	1837	R. C.....	.....	24	24	90	93	0	183	.....	.....	.....	.....	7	65
1849	1848	Non-sect.....	3	5	8	6	51	.....	57	Yes.....	0	26	.....	.....	66
1853	1846	Non-sect.....	1	3	4	32	20	2	52	Yes.....	4	10	.....	4	67
1841	1843	Non-sect.....	1	9	10	25	96	4	125	Yes.....	14	6	.....	14	68
1853	1853	Lutheran.....	4	6	10	4	92	.....	96	No.....	0	.....	.....	18	69
1829	1829	Non-sect.....	3	9	12	32	62	0	94	No.....	0	0	10	8	70
1851	1851	M. E.....	10	20	30	25	60	2	172	No.....	0	0	0	14	71
.....	1854	Non-sect.....	7	10	17	.....	.....	.....	56	No.....	0	.....	.....	5	72
1804	1803	Non-sect.....	5	10	15	30	144	0	174	No.....	0	0	4	14	73
1837	1835	Non-sect.....	2	11	13	.....	.....	.....	86	No.....	0	.....	7	9	74
1836	1837	Non-sect.....	5	35	40	.....	.....	.....	314	.....	.....	.....	0	.....	75
1856	1856	Presb.....	.....	7	7	.....	.....	.....	41	No.....	0	0	0	4	76
1833	1885	Presb.....	1	6	7	44	16	0	60	Yes.....	0	0	0	0	77
1871	1866	P. E.....	3	14	17	16	153	.....	153	No.....	0	.....	1	13	78
1869	1865	Non-sect.....	2	9	11	25	60	.....	85	Yes.....	14	.....	.....	14	79

TABLE 44.—DIVISION B.—Statistics of Institutions for

	Location.	Name.	Principal.
	1	2	3
	MISSISSIPPI.		
80	Blue Mountain.....	Blue Mountain Female College.....	W. T. Lowrey, A. M.....
81	Brookhaven.....	Whitworth Female College.....	L. T. Fitzhugh, A. M.....
82	Clinton.....	Central Female Institute.....	Rev. Walter Hillman, LL. D.....
83	Columbus.....	Industrial Institute and College for Education of White Girls of Mississippi.	Chas. H. Cocke.....
84	Corinth.....	Corinth Female College.....	Miss Lena Elgin.....
85	Holly Springs.....	Franklin Female College.....	Mrs. Rosa M. Tyler and Mrs. R. H. Tunstall.
86	Meridian.....	East Mississippi Female College.....	R. M. Saunders.....
87	Oxford.....	Union Female College.....	W. I. Davis, A. M.....
88	Pontotoca.....	Chickasaw Female College.....	W. V. Frierson.....
89	Port Gibson *.....	Port Gibson Female College.....	Rev. E. H. Mounger.....
90	Shuqualak.....	Shuqualak Female College.....	L. M. Stone.....
91	Starkville.....	Starkville Female Institute.....	T. G. Sellers, D. D.....
92	Summit.....	Lea Female College.....	Chas. H. Otken, A. M.....
	MISSOURI.		
93	Columbia.....	Christian Female College.....	W. A. Oldham.....
94	Columbia.....	Stephens Female College.....	T. W. Barrett, A. M.....
95	Fayette a.....	Howard Female College.....	Hubbard K. Hinde.....
96	Fulton *.....	Fulton Synodical Female College.....	Rev. B. H. Charles, D. D.....
97	Independence.....	Kansas City Ladies' College.....	J. M. Chaney.....
98	Independence.....	Woodland College.....	Geo. S. Bryant, A. M.....
99	Jennings.....	St. Louis Seminary.....	B. T. Blewett, LL. D.....
100	Lexington.....	Baptist Female College.....	F. Menefee.....
101	Lexington.....	Central Female College.....	W. F. Kerdolf.....
102	Lexington.....	The Elizabeth Aull Female Seminary.	J. D. B. Canton.....
103	Mexico.....	Hardin College.....	A. K. Yancey.....
104	St. Charles.....	Lindenwood Female College.....	Rev. Robert Irwin, D. D.....
105	St. Louis.....	Mary Institute, Washington University.	James H. Dillard.....
106	St. Louis.....	Ursuline Academy.....	Mother Joanna.....
	NEVADA.		
107	Reno.....	Bishop Whitaker's School for Girls..	J. M. Rankin.....
	NEW HAMPSHIRE.		
108	Exeter *.....	Robinson Female Seminary.....	George N. Cross, A. M.....
109	Tilton.....	New Hampshire Conference Seminary and Female College.	Rev. D. C. Knowles, D. D.....
110	West Lebanon.....	Tilden Seminary.....	E. Hubbard Barlow, A. M., PH. D.
	NEW JERSEY.		
111	Bordentown a.....	Bordentown Female College.....	Rev. William C. Bowen, A. M.
112	Burlington.....	St. Mary's Hall.....	Miss Julia McAllister.....
113	Freehold.....	Freehold Young Ladies' Seminary...	Miss Eunice D. Sewall.....
	NEW YORK.		
114	Albany (Kenwood).....	Academy of the Sacred Heart.....	Madam E. Hogan.....
115	Albany.....	St. Agnes School.....	Miss E. W. Boyd.....
116	Brooklyn.....	Brooklyn Heights Seminary.....	Charles E. West, F. B. B., LL. D.
117	Brooklyn.....	Packer Collegiate Institute.....	Truman J. Backus, LL. D.....
118	Buffalo.....	Buffalo Female Academy.....	Albert T. Chester.....
119	Canandaigua.....	Granger Place School.....	Miss Caroline A. Comstock.....

* Statistics of 1886-87.

a Statistics of 1885-86.

the Superior Instruction of Women for 1887-88.—PART I—Continued.

Date of Charter.	Date of Opening.	Religious Denomination.	Professors and Instructors.			Students.				Authorized by Law to Confer Degrees.	Number of Degrees Conferred in Course in 1887-88.	Number of Scholarships.		Number of Graduates, 1887-88.
			Male.	Female.	Total.	Number in Preparatory Department.	Number in Collegiate Department.	Number of Resident Graduates.	Total Number of Students Enrolled.			State.	Other.	
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1877	1873	Non-sect.....	.....	.....	16	.....	.....	.....	185	.....	.....	.....	.....	80
1839	1859	M. E. So.....	5	9	14	25	137	17	179	Yes.....	21	.....	.....	81
1853	1853	Baptist.....	2	6	8	.....	.....	.....	120	.....	.....	.....	.....	82
1884	1885	Non-sect.....	1	21	22	.....	262	.....	332	.....	.....	.....	.....	83
1878	1878	Non-sect.....	.....	4	4	.....	.....	.....	110	.....	.....	.....	.....	84
1849	1848	Non-sect.....	.....	5	5	35	50	.....	100	Yes.....	5	.....	.....	85
1872	1872	M. E. So.....	1	7	8	29	100	.....	.....	Yes.....	5	.....	.....	86
1854	1853	Cumb. Pres.	1	5	6	30	20	30	75	Yes.....	0	0	0	87
1852	1852	Presb.....	1	3	4	51	28	79	.....	Yes.....	6	.....	.....	88
1854	1837	M. E. So.....	1	5	6	.....	.....	.....	100	.....	.....	.....	.....	89
1852	1850	Baptist.....	1	4	5	33	59	2	94	Yes.....	7	.....	.....	90
1872	1869	Baptist.....	2	5	7	75	80	.....	.....	Yes.....	2	.....	.....	91
1877	1877	Baptist.....	1	4	5	20	40	.....	60	Yes.....	.....	.....	3	92
1850	1850	Christian.....	4	8	12	.....	.....	.....	135	.....	.....	.....	.....	93
1856	.....	.....	3	8	11	.....	.....	.....	155	.....	.....	.....	.....	94
1850	1855	Meth.....	8	2	10	.....	.....	.....	129	Yes.....	4	.....	.....	95
1870	1872	Presb.....	8	4	12	.....	.....	.....	107	Yes.....	7	.....	7	96
1884	1871	Presb.....	2	6	8	.....	.....	.....	102	Yes.....	1	.....	1	97
1874	1869	Christian.....	2	4	6	35	89	.....	124	.....	.....	.....	1	98
1872	1871	Non-sect.....	2	5	7	10	20	.....	30	Yes.....	.....	.....	.....	99
1855	1855	Baptist.....	4	5	9	20	57	5	82	Yes.....	3	.....	2	100
1859	1859	Presb.....	2	11	13	.....	.....	.....	127	Yes.....	.....	.....	.....	101
1859	1859	Presb.....	1	8	9	26	80	.....	106	Yes.....	0	0	0	102
1872	1872	Baptist.....	3	8	11	.....	120	.....	.....	Yes.....	14	0	5	103
1853	1830	Presb.....	2	8	10	.....	.....	.....	90	Yes.....	.....	.....	.....	104
1859	1878	.....	1	21	22	154	153	29	.....	No.....	.....	.....	24	105
1884	1849	R. C.....	1	24	25	240	30	.....	280	.....	.....	.....	2	106
.....	1876	P. E.....	1	7	8	.....	73	.....	73	No.....	.....	.....	2	107
1867	1869	Non-sect.....	2	7	9	.....	.....	.....	119	Yes.....	8	.....	.....	108
1852	1845	M. E.....	4	4	8	.....	213	.....	213	Yes.....	6	.....	1	109
1853	1854	Non-sect.....	1	7	8	5	35	.....	40	Yes.....	.....	.....	7	110
1853	1851	Non-sect.....	3	6	9	23	49	.....	72	Yes.....	9	.....	.....	111
1837	1837	P. E.....	1	9	10	30	33	3	68	.....	.....	.....	2	112
1884	1844	Non-sect.....	1	7	8	41	23	.....	64	No.....	.....	.....	.....	113
1861	.....	R. C.....	.....	25	25	.....	.....	.....	130	.....	.....	.....	12	114
1872	1871	P. E.....	9	26	35	.....	.....	.....	240	Yes.....	.....	.....	3	115
.....	1851	.....	5	16	21	.....	.....	.....	.....	.....	.....	.....	.....	116
1853	1854	Non-sect.....	4	39	43	381	371	600	752	No.....	0	0	20	117
1851	1851	Non-sect.....	2	11	13	20	55	.....	.....	No.....	.....	.....	17	118
.....	1876	Non-sect.....	2	8	10	16	53	.....	73	No.....	.....	.....	3	119

TABLE 44.—DIVISION B.—*Statistics of Institutions for*

	Location.	Name.	Principal.
	1	2	3
	NEW YORK—continued.		
126	New York.....	Academy of Mt. St. Vincent-on-the-Hudson.	Sister Maria Dodge.....
121	New York (Manhattan-ville) (130th St. and St. Nicholas Ave.).	Academy of the Sacred Heart.....	Madame S. Jones.....
122	New York (49 W. 17th St.)	Academy of the Sacred Heart.....	Rev. Charles H. Gardiner, PH. D.
123	New York (607 Fifth Avenue). <i>a</i>	Boarding and Day School for Young Ladies.	M. H. Johnson and Miss A. L. Jones
124	New York (131 W. 78th Street). <i>a</i>	English, French, and German Boarding and Day School.	Sister M. de la Victoire.....
125	Plattsburg.....	D'Youville Academy.....	
	NORTH CAROLINA.		
126	Asheville.....	Asheville Female College.....	James Atkins, Jr.....
127	Charlotte.....	Charlotte Female Institute.....	Rev. Wm. R. Atkinson.....
128	Greensborough.....	Greensborough Female College.....	Rev. T. M. Jones, A. M., D. D.....
129	Lenoir.....	Davenport Female College.....	Will H. Sanborn.....
130	Murfreesborough.....	Chowan Baptist Female Institute.....	J. B. Brown.....
131	Murfreesborough.....	Wesleyan Female College.....	E. E. Parham.....
132	Oxford.....	Oxford Female Seminary.....	E. P. Hobgood.....
133	Raleigh <i>a</i>	Estey Seminary.....	Rev. H. M. Tupper, D. D.....
134	Raleigh.....	Peace Institute.....	John B. Burwell.....
135	Raleigh.....	St. Mary's School.....	Bennett Smede.....
136	Statesville <i>a</i>	Statesville Female College.....	Fannie Everett.....
137	Thomasville.....	Thomasville Female College.....	Rev. J. N. Stallings.....
	OHIO.		
138	Cincinnati (Lawrence and 3rd Streets).	Bartholomew English and Classical School.	G. K. Bartholomew, A. M.....
139	Cincinnati (Wesley Ave.).	Cincinnati Wesleyan College.....	W. K. Brown.....
140	Cincinnati.....	Mt. Auburn Young Ladies' Institute.	H. Thane Miller.....
141	Glendale.....	Glendale Female College.....	Rev. L. D. Potter, D. D.....
142	Granville.....	Granville Female College.....	Rev. D. B. Hervey.....
143	Granville.....	Shepardson College.....	Galusha Anderson.....
144	Hillsborough.....	Hillsborough Female College.....	Rev. W. C. Helt, PH. D.....
145	Oxford.....	Oxford Female College.....	Rev. Faye Walker, D. D.....
146	Oxford.....	Western Female Seminary.....	Miss Leila S. McKee.....
147	Painesville.....	Lake Erie Female Seminary.....	Miss Mary Evans.....
	OREGON.		
148	Portland.....	St. Helen's Hall.....	Miss Mary B. Rodney.....
	PENNSYLVANIA.		
149	Allentown.....	Allentown Female College.....	Rev. Wm. M. Kelly, PH. D.....
150	Bethlehem.....	Moravian Seminary for Young Ladies.	Rev. J. Blickensderfer.....
151	Blairsville.....	Blairsville Ladies' Seminary.....	T. R. Ewing.....
152	Chambersburg.....	Wilson College.....	J. Edgar, PH. D.....
153	German town (West Chelton Avenue).	Boarding and Day School for Young Ladies.	Mary E. Stevens.....
154	Media.....	Brooke Hall Female Seminary.....	M. L. Eastman.....
155	Ogontz.....	Ogontz School for Young Ladies.....	Misses Frances E. Bennett and Sylvia J. Eastman, Rebecca E. Judkins.....
156	Philadelphia (1325 North Broad Street).	Philadelphia Seminary.....	Rev. A. H. Norcross, D. D.....
157	Pittsburg.....	Pittsburg Female College.....	Miss W. Sherrard.....
158	Washington.....	Washington Female Seminary.....	
	SOUTH CAROLINA.		
159	Columbia.....	Columbia Female College.....	Rev. O. H. Darby, D. D.....
160	Due West.....	Due West Female College.....	Mrs. L. M. Bonner.....
161	Greenville.....	Greenville Female College.....	A. S. Townes.....
162	Walhalla.....	Walhalla Female College.....	H. G. Reed.....

a Statistics of 1885-86.

the Superior Instruction of Women for 1837-88.—PART I—Continued.

Date of Charter.	Date of Opening.	Religious Denomination.	Professors and Instructors.			Students.				Authorized by Law to Confer Degrees.	Number of Degrees Conferred in Course in 1857-88.	Number of Scholarships.		Number of Graduates, 1857-88.
			Male.	Female.	Total.	Number in Preparatory Department.	Number in Collegiate Department.	Number of Resident Graduates.	Total Number of Students Enrolled.			State.	Other.	
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1865	1847	R. C.....	3	25	28	180	40			Yes.....				2 120
1851	1848	R. C.....	4	30	34	100	40	9	250			0		8 121
	1858	R. C.....		12	12	50	75		125					122
		Non-sect.....		15	15	25	75		100					123
	1869	Non-sect.....	8	9	17				100					124
1860	1862	R. C.....		12	12	100	20	2	135	No.....		132	3	2 125
		Meth.....	4	4	8	80	80		160	Yes.....	8	0	0	8 126
1839	1857	Presb.....	2	3	10	34	130	4	168	No.....		0	0	12 127
1838	1846	Meth.....	4	11	15	0	170		170	Yes.....	32	0		32 123
1856	1856	Non-sect.....	2	6	8	40	21		84	Yes.....				129
1849	1848	Baptist.....	2	6	8	12	60		72				12	8 130
1851	1852	Meth.....	2	4	6	13	33		51	Yes.....	3			3 131
1850	1880	Presb.....	2	7	9	23	94		117					132
1874	1870	Baptist.....				19	150		172					133
1857	1872	Presb.....	4	9	13	75	50		169	No.....				13 134
	1842	P. E.....	2	12	14				140	No.....				5 135
1874	1870	Non-sect.....			5				104					136
1857	1849	Baptist.....	3	5	8	34	53		87	Yes.....	2	0	0	2 137
	1875	P. E.....	3	12	15	42	76	3	121	No.....				7 138
1842	1842	M. E.....	5	11	16	11	90	0	101	Yes.....	25	0	0	25 139
1856	1856	Non-sect.....	3	10	13		83		83	Yes.....	12	0	0	12 140
1854	1854	Presb.....	2	9	11		125		125					141
	1827	Presb.....	2	7	9		75	5	75	No.....				10 142
1886	1837	Baptist.....	6	5	11	39	17		85	Yes.....		0	6	4 143
1854	1839	M. E.....	2	6	8	25	20	2	47	Yes.....	5			5 144
1848	1849	Presb.....	3	11	14	17	99	1	143	Yes.....		0	3	19 145
1853	1855	Presb.....		17	17	6	130		136					11 146
1856	1859	Non-sect.....	3	16	19	41	97		138	No.....	0			6 147
1869	1869	P. E.....	2	11	13				132					148
1867	1867	Reformed ..	1	5	6	38	46	1	96	Yes.....	2			10 149
1863	1735	Moravian ..	3	12	15	16	92	2	110	Yes.....	10			10 150
	1851		1	9	10				55					151
1869	1870	Presb.....	5	9	14	88	63	3	164	Yes.....	20	0	2	19 152
	1869	P. E.....	5	7	12	37	33	8		No.....				15 153
		P. E.....	2	12	14		50							7 154
	1850	Non-sect.....	7	17	24				114	No.....				21 155
	1871		3	14	17				100					156
1854	1854	Non-sect.....	4	10	14				200					157
1837	1836	Presb.....	3	15	18	20	155	0	210					23 158
1854	1857	M. E. So ..	3	10	13	6	126		140	No.....			2	18 159
1859	1860	Non-sect.....	1	9	10	80	65		146	Yes.....				6 160
1854	1855	Baptist.....	3	11	14	67	160		227	Yes.....	6	0	0	18 161
1872	1872	Non-sect.....	2	3	5	15	65		80	Yes.....	0			18 162

TABLE 44.—DIVISION B.—Statistics of Institutions for

	Location.	Name.	Principal.
	1	2	3
	TENNESSEE.		
163	Brownsville.....	Brownsville Female College.....	Rev. J. D. Anderson, A. M.....
164	Brownsville.....	Wesleyan Female College.....	Rev. Jno. Williams, A. M.....
165	Columbia.....	Columbia Athenæum.....	Robt. D. Smith, A. M.....
166	Jackson.....	Memphis Conference Female Institute.	Rev. A. W. Jones, A. M., D. D..
167	McMinnville*.....	Cumberland Female College.....	N. J. Finney, A. M.....
168	Murfreesborough*.....	Soule Female College.....	Rev. John R. Thompson, A. M.
169	Nashville (108 Vauxhall Street).	Nashville College for Young Ladies.	Rev. Geo. W. F. Price, D. D.....
170	Nashville.....	St. Cecilia Academy.....	Mother Frances.....
171	Nashville.....	Ward's Seminary for Young Ladies.	J. B. Hancock.....
172	Pulaski.....	Martin Female College.....	John S. Wilkes.....
173	Rogersville.....	Synodical Female College.....	Mrs. F. A. Ross.....
174	Shelbyville.....	Shelbyville Female College.....	J. P. Hamilton, A. M.....
175	Winchester.....	Mary Sharp College.....	J. C. Graves, LL. D.....
	TEXAS.		
176	Georgetown.....	Ladies' Annex, South-Western University.	John H. McLean, vice-regent..
177	Belton.....	Baylor Female College.....	John H. Luther, D. D.....
178	Victoria.....	Nazareth Academy.....	St. Mary St. Claire.....
179	Waco.....	Waco Female College.....	R. O. Rounsavall, A. M.....
	VERMONT.		
180	Montpelier.....	Vermont Methodist Seminary and Female College.	Rev. E. A. Bishop, A. M.....
	VIRGINIA.		
181	Abingdon.....	Martha Washington College.....	Rev. D. S. Hearon, A. M., D. D..
182	Charlottesville.....	Albemarle Female Institute.....	W. P. Dickinson.....
183	Christiansburg.....	Montgomery Female College.....	Mrs. E. T. Baird.....
184	Danville.....	Danville College for Young Ladies..	R. H. Sharp, Jr.....
185	Danville.....	Roanoke Female College.....	J. T. Averett, A. M.....
186	Hollins.....	Hollins Institute.....	Chas. L. Cocke, A. M.....
187	Marion.....	Marion Female College.....	J. H. Scherer, A. M.....
188	Norfolk.....	Norfolk College for Young Ladies..	John L. Roper.....
189	Petersburg.....	Southern Female College.....	W. T. Davis, A. M.....
190	Staunton.....	Staunton Female Seminary.....	Rev. James Willis, A. M.....
191	Staunton.....	Virginia Female Institute.....	Mrs. J. E. B. Stuart.....
192	Staunton.....	Wesleyan Female Institute.....	Rev. W. A. Harris, D. D.....
193	Warrenton.....	Fauquier Institute.....	Geo. G. Butler, A. M.....
194	Winchester.....	Valley Female College.....	Rev. John P. Hyde, A. M., D. D.
	WEST VIRGINIA.		
195	Clarksburg.....	Broadus College.....	F. S. Lyon, A. M.....
196	Parkersburg.....	Parkersburg Female Seminary.....	Mrs. H. L. Field.....
197	Wheeling.....	Wheeling Female College.....	Rev. H. R. Blaisdell, A. M., Ph. D.
	WISCONSIN.		
198	Fox Lake*.....	Wisconsin Female College.....	Miss Helen A. Pepon.....
199	Milwaukee.....	Milwaukee College.....	Charles S. Farrar, A. M.....
200	Sinsinawa Mound.....	St. Clara Academy.....	Sister M. Emily Power.....

* Statistics of 1886-87.

a Statistics of 1885-86.

the Superior Instruction of Women for 1887-88.—PART I—Continued.

Date of Charter.	Date of Opening.	Religious Denomination.	Professors and Instructors.			Students.				Authorized by Law to Confer Degrees.	Number of Degrees Conferred in Course in 1887-88.	Number of Scholarships.		Number of Graduates, 1887-88.
			Male.	Female.	Total.	Number in Preparatory Department.	Number in Collegiate Department.	Number of Resident Graduates.	Total Number of Students Enrolled.			State.	Other.	
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1851	1851	Baptist.....	1	5	6	47	53	26	100	Yes....	7	0	0	7
1870	1857	Meth.....	1	3	4	30	25	.....	56	Yes....	1	.....	.....	1
1858	1852	Non-sect.....	5	13	17	.....	.....	.....	162	Yes....	.....	0	5	11
1843	1844	M. E. So.....	2	8	10	40	120	41	160	Yes....	14	0	0	21
1850	1850	Cumb. P.....	3	2	5	51	99	.....	150	Yes....	8	.....	.....	167
1851	1852	M. E. So.....	1	6	7	.....	.....	.....	89	Yes....	9	.....	.....	2
1852	1850	M. E. So.....	2	16	18	22	.....	.....	304	.....	6	0	0	15
1853	1850	R. C.....	.....	21	21	25	80	10	.....	Yes....	.....	.....	.....	5
1869	1855	Non-sect.....	1	18	19	168	192	14	314	Yes....	24	0	0	24
1872	.....	Non-sect.....	2	11	13	.....	.....	.....	184	Yes....	.....	.....	.....	172
.....	.....	Non-sect.....	2	10	12	.....	.....	.....	94	.....	.....	.....	.....	173
1854	1853	Non-sect.....	1	5	6	30	70	.....	100	Yes....	1	0	1	2
1850	1851	Baptist.....	4	3	7	53	125	4	182	Yes....	24	0	0	24
1873	1873	M. E. So.....	9	5	14	33	74	15	122	Yes....	7	.....	1	7
1845	.....	.....	.....	.....	18	.....	.....	.....	250	.....	.....	.....	.....	177
1880	1866	R. C.....	.....	13	13	176	24	.....	200	Yes....	4	.....	4	178
1857	1857	Meth.....	4	7	11	57	100	4	161	No.....	.....	.....	10	179
1834	1834	M. E.....	4	5	9	23	83	1	129	Yes....	3	0	25	9
.....	.....	Non-sect.....	4	7	11	78	6	.....	84	Yes....	.....	.....	.....	181
1875	1856	Baptist.....	2	6	8	0	60	3	60	Yes....	3	.....	3	182
1857	1857	Non-sect.....	3	6	9	.....	.....	1	113	Yes....	.....	1	.....	3
1853	1853	M. E. So.....	3	6	9	35	83	.....	118	Yes....	7	.....	7	184
1859	1859	Baptist.....	3	3	6	14	76	0	90	Yes....	.....	0	0	3
1843	1842	Baptist.....	6	11	17	15	145	.....	180	Yes....	2	0	0	183
1874	1873	Luth.....	3	5	8	26	70	.....	96	Yes....	4	.....	3	187
1880	1880	Non-sect.....	3	8	11	33	103	.....	214	Yes....	.....	0	.....	188
1863	1862	Non-sect.....	2	4	6	13	31	.....	46	Yes....	3	.....	.....	189
1870	1870	Luth.....	5	4	9	.....	.....	.....	80	Yes....	.....	.....	5	190
1843	1843	P. E.....	4	10	14	35	63	.....	103	Yes....	.....	19	.....	191
1837	1837	M. E. So.....	.....	.....	15	.....	.....	.....	105	.....	12	.....	.....	192
1856	1857	Non-sect.....	2	4	6	15	26	.....	41	Yes....	0	.....	.....	193
1870	1870	M. E. So.....	2	5	7	9	54	1	64	.....	.....	.....	6	194
1888	1871	Baptist.....	1	6	7	4	32	.....	59	Yes....	.....	.....	4	195
1883	1872	Non-sect.....	.....	3	3	.....	.....	.....	40	Yes....	.....	.....	1	196
1843	1843	Non-sect.....	1	8	9	6	42	4	52	Yes....	3	.....	3	197
1835	1856	Cong.....	.....	6	6	.....	.....	.....	59	.....	.....	.....	.....	198
1853	1853	Non-sect.....	2	12	14	100	35	.....	183	Yes....	8	0	0	199
1852	1852	R. C.....	.....	17	17	55	50	2	107	Yes....	.....	0	.....	2

TABLE 44.—DIVISION B.—Statistics of Institutions for the Superior Instruction of Women for 1887-88.—PART II.

Location.	19	20	21	22	23	24	25	26	27	28	29	30
	Number of Years in Collegiate Course.	Number of Volumes in Library.	Annual Charge for Tuition to Each Pupil.	Average Cost of Board and Lodging.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Fund.	Income for the Year from Productive Fund.	Amount of State or Municipal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions within the Year.
ALABAMA.												
1 Athens Female College *	5	150	\$46	\$134		\$20,000						
2 Union Female College.....	4	85	40	150	\$50	5,000						
3 Huntsville Female College.....	5	5,363	20-60	150	8,250	40,000	0	0	0		\$23,632	
4 Huntsville Female Seminary.....	4	500	30-50	175		20,000						
5 Judson Female Institute.....	4	3,000	63	140	250	40,000	0	0	0	\$3,970	10,320	0
6 Marion Female Seminary.....			60	140		20,000						
7 Synodical Female Institute a.....	6		25-30	125		20,000						
8 Central Female College.....	4	300	10-60	150	500	210,000	0	0	0			0
9 Tuscaloosa Female College.....			20-60	150								
10 Alabama Conference Female College.....			15-25	150								
CALIFORNIA.												
11 The Ellis College.....			25	175								
12 Mills College.....	4	4,000	60	200	2,000	300,000	\$70,000	\$4,900	0		4,900	
13 Santa Rosa Ladies' College.....			(150)									
CONNECTICUT.												
14 Hartford Female Seminary.....	4	800	40-100	450		25,000						
GEORGIA.												
15 Lucy Cobb Institute.....	5		30	75								
16 Georgia Methodist Female College.....	4	500	40-50	100-135	200	20,000	0	0	\$230			
17 Andrew Female College.....	5	2,000	20-60	120	1,000	10,000						
18 Dalton Female College.....			12-20	100								
19 Monroe Female College.....	4	400	30-50	170		15,000	0					
20 Georgia Baptist Seminary for Young Ladies a.....	4	400	30-50	120		10,000						
21 Griffin Female College.....	4-6	1,500	20-70	144	500	5,000	0	0	0			0
22 La Grange Female College.....	5	300	20-50	135-150	400	60,000	0	0	174	8,000		

23	Southern Female College.....	4	1,000	30-50	150	5,000	40,000	50,000	3,000	0	.....
24	Wesleyan Female College.....	4	2,500	50	225	2,000	250,000	.....	.....	.....	.....
25	College Temple a.....	1	1,500	20-50	125	.....	25,000	.....	.....	.....	.....
26	Shorter College *.....	5	200	27-54	180	400	131,000	40,000	.....	.....	.....
27	Young Female College.....	5	.....	30	125	.....	14,000	.....	.....	.....	.....
ILLINOIS.											
28	Seminary of the Sacred Heart.....	8	1,100	(200)	150	1,500	.....	.....	.....	.....	.....
29	Albana College.....	4	1,500	45	135	250	40,000	.....	.....	2,500	.....
30	Illinois Female College.....	4	2,000	40	150	500	100,000	0	0	0	.....
31	Jacksonville Female Academy.....	3	1,500	50	270	300	50,000	.....	.....	.....	.....
32	St. Mary's School.....	4	1,200	100	260	1,500	100,000	0	0	0	.....
33	Chicago Female College.....	3-7	400	50	210	250	40,000	.....	.....	16,850	9,450
34	Mt. Carroll Seminary.....	5	.....	(234)	.....	.....	100,000	.....	.....	0	.....
35	Rockford Seminary.....	7	.....	(300)	.....	.....	125,000	.....	.....	.....	.....
INDIANA.											
36	De Pauw College for Young Women a.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
IOWA.											
37	Immaculate Conception Academy a.....	.....	2,527	.....	150	.....	.....	.....	.....	.....	.....
38	Callanan College a.....	.....	.....	30-36	.....	.....	50,000	.....	.....	.....	.....
KANSAS.											
39	College for Young Ladies.....	4	350	30-40	210	30	35,000	0	0	0	.....
40	College of the Sisters of Bethany.....	3	1,200	.....	.....	1,000	418,000	.....	.....	1,500	2,500
KENTUCKY.											
41	Caldwell College.....	5	40	50	160	.....	20,000	0	0	0	.....
42	Georgetown Female Seminary.....	4	500	30-60	160	.....	25,000	.....	.....	7,000	.....
43	Liberty Female College.....	3	50	40	130	.....	25,000	.....	.....	5,758	.....
44	Daughters' College.....	5	3,000	50	250	2,000	3,500	.....	.....	3,500	590
45	Rethel Female College.....	4	300	50	120	150	30,000	.....	0	0	.....
46	Hamilton Female College.....	4	400	60	230	470	50,000	0	0	0	.....
47	St. Catharine's Female Academy.....	12	700	30	132	400	12,000	.....	.....	6,784	0
48	Sayre Female Institute *.....	.....	.....	60	230	.....	100,000	.....	.....	.....	.....
49	Hampton College.....	4	2,000	150	.....	4,000	20,000	.....	.....	25,000	0
50	Louisville Female College a.....	.....	300	50-130	300	.....	40,000	.....	.....	.....	.....
51	Millersburg Female College.....	4-6	1,500	15-27	160	150	15,000	.....	.....	.....	.....
52	Mt. Sterling Female College.....	4	.....	20-50	120	.....	6,000	.....	.....	2,000	0
53	Jessamine Female Institute.....	4	.....	27-52	200	.....	16,000	.....	.....	.....	.....
54	Kentucky College for Young Ladies.....	4-5	250	20-25	80	.....	.....	.....	.....	3,000	0
55	Loran Female College a.....	.....	1,000	45	135	.....	35,000	.....	.....	.....	.....
56	Science Hill School.....	4	2,000	42	200	300	25,000	.....	.....	6,000	.....
57	Stuart's Female College.....	4	300	32-50	160	200	10,000	.....	.....	21,960	.....
58	Stanford Female College.....	4	200	25-50	250	.....	5,000	.....	.....	21,000	.....
59	Cedar Bluff Female College.....	4	1,200	40	140	.....	25,000	.....	.....	3,200	.....

a Statistics of 1889-90.

* Statistics of 1886-87.

TABLE 41.—DIVISION B.—Statistics of Institutions for the Superior Instruction of Women for 1887-88.—PART II—Continued.

Location.	19	20	21	22	23	24	25	26	27	28	29	30
	Number of Years in Collegiate Course.	Number of Volumes in Library.	Annual Charge for Tuition to Each Pupil.	Average Cost of Board and Lodging.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Fund.	Income for the Year from Productive Fund.	Amount of State or Municipal Aid Received within the Year.	Amount of Receipts from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions within the Year.
2												
LOUISIANA.												
60 Stillman Female Collegiate Institute.....	4-6	400	\$22-52	\$130	\$200	\$30,000	\$27,000	\$2,500	0	\$2,500		
61 Mansfield Female College *.....		500	20-50	135		25,000						
62 Minden Female College.....	2	1,000	50	100	50	15,000	0	0	0			0
MAINE.												
63 Westbrook Seminary and Female College.....	4	3,000	38	125	600	100,000	20,000	900		1,000	\$4,900	\$3,000
64 Maine Wesleyan Seminary and Female College....	4	5,559	18-30	125	5,000	106,000	116,000	5,000		6,458	12,058	50,000
MARYLAND.												
65 Baltimore Academy of the Visitation.....	8	4,000	55-79									
66 Baltimore Female College.....	4	3,928	40-60	225	650	26,500			\$2,600	3,000		
67 Cambridge Female Seminary.....	4	650	36	200	175	10,000			500			
68 Frederick Female Seminary.....	5	2,000	50	225	1,200	75,000	24,000	1,200		3,600	10,000	
69 Lutherville Seminary.....	4	1,000	60	165	300	40,000						
MASSACHUSETTS.												
70 Abbot Academy.....	4	2,900	54	246		50,000	16,084	1,018	525	6,425	32,975	23,057
71 Lasell Seminary for Young Women.....	4	1,400	100	300	2,000	115,000	0	0	0			
72 Gannett Institute.....	4	4,000		500	500	50,000						
73 Bradford Academy.....	4	4,000	60	275	3,000	200,000	36,000	2,000		8,000	5,000	6,800
74 Wheaton Female Seminary.....	4	5,029	65	235	500		3,500	920		4,929	5,476	
75 Mt. Holyoke College.....		12,171	(175)			258,000	205,000	13,330	0	52,300		15,000
MICHIGAN.												
76 Michigan Female Seminary.....	4	1,438	(200)		700	50,000	30,000	2,000		7,200	2,000	450

MINNESOTA.

77	Albert Lea College.....	4	1,300	30	200	200	35,000	0	0	1,800	0	4,500
78	St. Mary's Hall.....	4	3,000	350	160	600	100,000			40,000		3,425
79	Beunet Seminary.....	4	350	30-90	350	300	75,000			5,000		

MISSISSIPPI.

80	Blue Mountain Female College.....			40	110							
81	Whitworth Female College.....			172	120							
82	Central Female Institute.....	4	600	40-50	150	250	75,000			6,000		
83	Industrial Institute and College for Education of White Girls of Mississippi.....	4		60	100		100,000		22,589		30,922	0
84	Corinth Female College.....											
85	Franklin Female College.....	4	150		150		10,000					
86	East Mississippi Female College.....	5	300	30-50	130	150	20,000					
87	Union Female College.....	4	1,000	165	165	390	50,000		0			0
88	Chickasaw Female College a.....		2,000	20-40	80		15,000					
89	Port Gibson Female College *.....		1,000		125		50,000					
90	Shuqualak Female College.....	4	150	25-45	100	125	8,000			3,400		
91	Starkville Female Institute.....	5	1,000	25-50	140	150	10,000					
92	Lea Female College.....	4	300	40	113		10,000			2,500		

MISSOURI.

93	Christian Female College.....			(200)								
94	Stephens Female College.....		400	(250)			35,000					21,000
95	Howard Female College.....			30-50	140		15,000					
96	Fulton Synodical Female College *.....			50	150		30,000					
97	Kansas City Ladies' College.....			40, 30	170	1,000	40,000				9,100	0
98	Woodland College.....	1	1,200	80	130	1,000	20,000		0			0
99	St. Louis Seminary.....	4	2,000	20-30	400		25,000			4,000	4,000	
100	Baptist Female College.....	4	350		150							
101	Central Female College.....			20-50	140							
102	The Elizabeth Aul Female Seminary.....	0	400	24-54	160	500	30,000		0	5,000	5,000	0
103	Hardin College.....	4	100	40	160	2,000	110,000	45,000	0			
104	Lindenwood Female College.....	4	8,000	50	200		75,000	12,000	700	22,640		
105	Mary Institute, Washington University.....	5	600	70-160			100,000		0			
106	Ursuline Academy.....	5	1,200	(150)								

NEVADA.

107	Bishop Whitaker's School for Girls.....		400	(250)			20,000	0	0	10,000		
NEW HAMPSHIRE.												
108	Robinson Female Seminary *.....		550	30	95-135		90,000					170,000
109	New Hampshire Conference Seminary and Fe- male College.....	3-4	500	30	150	300	75,000	30,000	1,800			
110	Tilden Seminary.....	4	1,500	45	255	500	60,000	2,000	0	2,500	2,920	300

* Statistics of 1886-87.

a Statistics of 1885-86.

TABLE 44.—DIVISION B.—Statistics of Institutions for the Superior Instruction of Women for 1887-88.—PART II—Continued.

	Location.	19	20	21	22	23	24	25	26	27	28	29	30
		Number of Years in Collegiate Course.	Number of Volumes in Library.	Annual Charge for Tuition to Each Pupil.	Average Cost of Board and Lodging.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Perma- nent Productive Fund.	Income for the Year from Productive Fund.	Amount of State or Municipal Aid Re- ceived within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources, except Charges for Board and Lodging.	Benefactions within the Year.
NEW JERSEY.													
111	Bordentown Female College <i>a</i>	3	675	(\$200)			\$30,000						
112	St. Mary's Hall.....	4	2,500	(350)	\$350	\$100	100,000	0	\$16,000	0			
113	Freehold Young Ladies Seminary.....	4	164	\$50-60			23,000					0	
NEW YORK.													
114	Academy of the Sacred Heart.....	6	2,225	250		500	150,000				\$50,000		
115	St. Agnes School.....	13	3,000	30-100	400								
116	Brooklyn Heights Seminary.....	6	5,045	60-140	400	7,500	220,000				61,019	\$1,200	\$1,400
117	Packer Collegiate Institute.....	6	1,698	50-120		3,000	150,000				12,000		400
118	Buffalo Female Academy.....	3-7	1,400	76	324	300	25,000				8,712	7,810	50
119	Granger Place School.....	4	5,000	295	190	25,000	500,000				42,900		11,500
120	Academy of Mt. St. Vincent-on-the-Hudson.....	3	300	(300)	58								
121	Academy of the Sacred Heart.....			100-250	700								
122	Academy of the Sacred Heart.....												
123	Boarding and Day School for Young Ladies <i>a</i>												
124	English, French, and German Boarding and Day School <i>a</i>												
125	D'Youville Academy.....	5	760	40	150	70	20,000		300		655	2,664	95
NORTH CAROLINA.													
126	Asheville Female College.....	4		30-50	130	2,000	100,000			0			
127	Charlotte Female Institute.....	4	100	50	150	600	30,000	0		0			
128	Greensborough Female College.....	4	2,000	50-100	175	2,000	75,000	\$3,000	180	0	10,000	12,000	0
129	Davenport Female College.....	4		50	200		4,000			0			
130	Chowan Baptist Female Institute.....	4		40-50	108			0		0	4,000	4,148	
131	Wesleyan Female College.....	4		30-50	108		20,000				2,200		
132	Oxford Female Seminary.....			(170)									
133	Estey Seminary <i>a</i>			12	40								

134	Peace Institute.....	4	1,000	30-50	250	600	60,000					
135	St. Mary's School.....	4	3,000	150	150	500	75,000					
136	Stateville Female College.....			20-40	130							
137	Thomasville Female College.....	4-5	400	20-135	100	50	12,500	0	0	4,500	4,950	0
OIOO.												
138	Bartholomew English and Classical School	6	500	90-160	400		40,000					
139	Cincinnati Wesleyan College.....	4	1,100	100	400	500	290,000	0	0		15,000	7,000
140	Mt. Auburn Young Ladies' Institute	4		(600)			150,000	0	0			0
141	Glendale Female College.....		3,000	22	250	1,000	75,000					
142	Guanville Female College.....	5	1,000	35	180	50	1,500					
143	Shepardson College.....	3-4		30-35	150		35,000	65,000	3,900	3,000	6,900	500
144	Hillsborough Female College.....	4	300	40-50	200	50	50,000	6,000	350	1,000	300	
145	Oxford Female College.....	4	3,000	(250)								1,500
146	Western Female Seminary.....	4	4,500	(172)			134,624	23,503	1,900	17,538	4,459	16,000
147	Lake Erie Female Seminary.....	4	2,600	(200)		2,000	175,000	32,380	20,114	27,000	2,017	100
OREGON.												
148	St. Helen's Hall.....			(160)								
PENNSYLVANIA.												
149	Allentown Female College.....		500	40	180		50,000	0	0	2,500	3,000	2,000
150	Moravian Seminary for Young Ladies	4	6,000	60	200		175,000					
151	Blairstown Ladies' Seminary.....			20	100							
152	Wilson Female College.....	4	2,800	60	130	1,000	80,000	0	0	9,000	9,000	2,000
153	Boarding and Day School for Young Ladies.....		1,500	135	600							
154	Brookline Hall Female Seminary.....	4	700	(400)		500	50,000					
155	Opontz School for Young Ladies.....		4,000	125-200	700	1,000	1,000,000					
156	Philadelphia Seminary.....	4	1,800	130	650		30,000					
157	Pittsburg Female College.....		1,100	60-80	220							
158	Washington Female Seminary.....	4	500	24-40	210	300	25,000					
SOUTH CAROLINA.												
159	Columbia Female College.....	4	600	50	150	800	50,000			5,000		
160	Dur West Female College.....	4	300	45	120		14,000	1,000	80	3,500		
161	Greenville Female College.....	5	500	30-50	100-130	700	25,000	0	0			0
162	Walhalla Female College.....	4		10-40	100		5,000					
TENNESSEE.												
163	Brownsville Female College.....	4	350	37	135	500	20,000		200	0	3,500	0
164	Wesleyan Female College.....	4	500	27-50	239		6,000	0	0		2,000	0
165	Columbia Athenaeum.....	4	8,500	25-60	180	4,000	100,000				1,500	0
166	Memphis Conference Female Institute.....	5	4,000	25		1,000	45,000					
167	Cumberland Female College.....		2,000	15, 25	120		25,000					
168	Soule Female College.....		50	40-50	120		16,000					
169	Nashville College for Young Ladies.....	2-4	500	40-76	200		75,000	3,000	180			0

a Statistics of 1885-86.

* Statistics of 1886-87.

TABLE 44.—DIVISION B.—Statistics of Institutions for the Superior Instruction of Women for 1887-88.—PART II—Continued.

Location.	Number of Years in Collegiate Course.	Number of Volumes in Library.	Annual Charge for Tuition to Each Pupil.	Average Cost of Board and Lodging.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Fund.	Income for the Year from Productive Fund.	Amount of State or Municipal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions within the Year.
	19	20	21	22	23	24	25	26	27	28	29	30
TENNESSEE—continued.												
170 St. Cecilia Academy.....	4	5,000	\$40-60	\$200	\$500	\$150,000				\$15,000	\$11,000	
171 Ward's Seminary for Young Ladies.....	10		50	240	200	50,000						
172 Martin Female College.....			20-50	150		30,000	\$50,000					
173 Synodical Female College.....			17-35	120								
174 Shelbyville Female College.....	4	800	30-40	120	500	8,000	0	0	0	3,500	0	0
175 Mary Sharp College.....	4	2,000	30-120	195	500	20,000	0	0	0		0	0
TEXAS.												
176 Ladies' Annex, South-Western University.....	3-5	200	40-60	135	8,000	30,000				3,500	5,000	
177 Baylor Female College.....		1,000				104,000						
178 Nazareth Academy.....	5	1,000	10-30	120		6,000	0	0	\$855	1,000	0	0
179 Waco Female College.....	4	1,200	50	140	750	35,000				8,000		
VERMONT.												
180 Vermont Methodist Seminary and Female College..	4	1,500	35	125	100	80,000	20,000	\$1,200	0		1,200	\$3,000
VIRGINIA.												
181 Martha Washington College.....	4		15-30			30,000				300		
182 Albemarle Female Institute.....	3	1,500	(200)			25,000						
183 Montgomery Female College.....				150		40,000						
184 Danville College for Young Ladies.....	4	1,500	50	135	300	34,000	0	0	0	3,805	0	0
185 Roanoke Female College.....	4	1,500	49	135	300	80,000	0	0	0	15,000	15,000	0
186 Hollins Institute.....		200	60	180	2,500	20,000			1,600			
187 Marston Female College.....		200	20-40	100	150	40,000	0	0	0	11,750		
188 Norfolk College for Young Ladies.....	5	180	20-60	180	500	12,000				2,500		
189 Southern Female College.....	4	1,500	30-50	150	500	20,000						
190 Staunton Female Seminary.....	4		50	145								

191	Virginia Female Institute	3-4	500	(250)	500	40,000							0
192	Westeynn Female Institute <i>a</i>	4	450	40	280	40,000							
193	Fauquier Institute	2-3	600	25-35	220	10,000							
194	Valley Female College					12,000					1,750	6,000	
WEST VIRGINIA.													
195	Broadus College	4	200	50	150	10,000							
196	Parkersburg Female Seminary		400	35-45	130						2,000		0
197	Wheeling Female College	4	200	50	200	10,000							
WISCONSIN.													
198	Wisconsin Female College*		1,400	23	122	3,000							
199	Milwaukee College	4	2,000	50-60	240	2,000					7,500		0
200	St. Clara Academy	4	1,150	75	100	1,000	60,000				8,000		30

* Statistics of 1886-87.

a Statistics of 1885-86.

List of Institutions for the Superior Instruction of Women from which no Information has been Received.

Location.	Name.	Location.	Name.
San José, Cal.....	College of Notre Dame.	Anderson, S. C.....	Anderson Female Seminary.
Waterbury, Conn..	Congrégation de Notre Dame	Williamston, S. C..	Williamston Female College.
Rome, Ga.....	Rome Female College.	Franklin, Tenn.....	Tennessee Franklin College.
Clinton, Ky.....	Clinton College.	Mossy Creek, Tenn..	Baptist Female College.
Collegeville, Pa....	Pennsylvania Female College.	Winchester, Va.....	Episcopal Female Institute.

Memoranda to Table 44.

Location.	Name.	Remarks.
Galesburg, Ill.....	Knox Seminary.....	Included in report of Knox College, Table 49.
Lake Forest, Ill.....	Ferry Hall, Lake Forest University....	Included in report of Lake Forest University, Table 49.
Fort Wayne, Ind.....	Westminster Seminary.....	Transferred to Table 42.
St. Mary's, Ind.....	St. Mary's Academic Institute.....	Transferred to Table 42.
Lancaster, Ky.....	Garrard Female College.....	Closed.
Paris, Ky.....	Bourbon Female College.....	Closed.
Keachi, La.....	Keachi College.....	Transferred to Table 49.
Baltimore, Md.....	Park Place Collegiate Institute.....	Does not exist.
Pascagoula, Miss.....	Mexican Gulf Female Seminary.....	Does not exist.
Hillsborough, Ohio...	Highland Institute.....	Changed to Hillsboro' Conservatory of Music.
York, Pa.....	Cottage Hill College.....	Does not exist.
Clarksville, Tenn....	Broadhurst Institute.....	Mail returned.
Bryan, Tex.....	Bryan Female Institute.....	Does not exist.
Independence, Tex...	Baylor Female College.....	Post-office changed to Baylor, Tex.
Keswick Depot, Va...	Edge Hill School.....	Transferred to Table 42.

UNIVERSITIES AND COLLEGES OF LIBERAL ARTS.

The provision for science instruction and for a high order of technical training and the development of university foundations are the most noticeable features in the progress of superior instruction during the past decade.

The latter movement manifests itself in two directions, namely, the grouping of undergraduate, graduate, and professional schools under one charter and the extension of university courses of instruction.

For the purpose of showing the present status of this movement and of facilitating future comparative studies, Tables 45 and 46 have been added to the statistical scheme for collegiate and professional schools.

REMARKS ON TABLES 45 AND 46.

Table 45 presents in a convenient form for study the statistics of twelve foundations, comprising groups of related faculties, schools, or colleges, or engaged chiefly in the work of post-graduate instruction. Their professors number one thousand one hundred and twenty-five, and their students eleven thousand three hundred and fifty-four. A small proportion of the students ($3\frac{1}{2}$ per cent.) are in preparatory departments, reported by two of the institutions. Of the remaining students, 56 per cent. are undergraduates, 6 per cent. in graduate departments, and 38 per cent. in professional schools.

In respect to teaching staff, libraries, and all material appliances, these institutions are well equipped. The comparison of Columns 11 and 12 shows an average of one professor to ten students or less in seven cases, while in none does the number of students to a professor exceed seventeen. These ratios can not, of course, be taken as an exact measure of the available teaching force, which depends also upon the character of the instruction as determined by the subject treated and the maturity of the students. Still the numerical relation is an accepted basis for the comparison of institutions, and its favorable indications should not be overlooked.

As regards endowed professorships, the eight institutions here tabulated, which report under this head, comprise 19 per cent. of the entire number reported from all colleges of liberal arts. (*Vide* Table 47, p. 628.)

The total income of eleven of these foundations amounts to \$2,939,073, derived as follows: From productive funds, 49 per cent.; from tuition fees, 29 per cent; not specified, 22 per cent.

These foundations were favored with benefactions to the amount of \$934,232.

Table 46 presents the statistics of twenty-four State universities. These report a total of nine thousand four hundred and one students and seven hundred and twenty-nine professors. The students are distributed as follows: In preparatory departments, 10 per cent.; in undergraduate departments, 53 per cent.; in graduate departments, 2 per cent., and in professional schools, 27 per cent., leaving 6 per cent. not distributed.

The comparison of Columns 10 and 11 shows the relative strength of the universities with respect to teaching staff. In fourteen out of the twenty-four the average of students to one professor ranges from twelve to sixteen; in seven the average is less than twelve, and in three it is more than sixteen, the highest average being twenty-one students to one professor.

Omitting the University of Nevada, which makes no report under this head, the total income of the remaining State universities, twenty-three in number, amounted, so far as reported, to \$1,974,840. This sum was derived as follows:

From productive funds, 36 per cent.; from tuition fees, 10½ per cent.; from State appropriations, 38½ per cent.; from other sources, 15 per cent.

It should be observed that the departments of the universities included in Tables 45 and 46 are tabulated also in the tables to which they respectively belong. In the case of seven of the institutions in Table 45 and sixteen in Table 46, the financial particulars are identical with those reported in connection with the collegiate departments, Table 49.

In the case of the remaining universities¹, the financial particulars represent the total of items distributed in Tables 49, 55, 57, 65, 67, 69.

The Tables before us show a total of eight hundred and sixteen resident graduate students² not in professional schools reported from twenty institutions. They form 91 per cent. of all such students³ reported in colleges of liberal arts.

As regards professional schools, theology has no representation in Table 46; five schools with three hundred and seventy-two students are included in Table 45.

Of forty-nine schools of law reported from the entire country (*vide* Table 67) twenty-three are included in the two Tables before us. Their students numbered two thousand four hundred and thirteen, or 66 per cent. of all law students.

Of one hundred and twenty schools of medicine (*vide* Table 69) nineteen are included in the two Tables before us. Their students numbered three thousand and ninety, or 22 per cent. of all medical students reported.

The remaining professional students included in Tables 45 and 46 are distributed in dental, pharmaceutical, and veterinary schools.

STATE AID FOR STATE UNIVERSITIES.

State appropriations, which form the chief source of income for State universities, are affected by many conditions entirely apart from the necessities of the universities and the interests of higher education. For this reason strenuous efforts are made from time to time, by those upon whom the conduct of the universities devolves, to secure legislation that shall put the appropriations upon a fixed basis.

The following universities have the benefit of a fixed tax:

University of California, a tax of one cent on each one hundred dollars of assessed valuation; University of Colorado, tax of one-fifth of a mill on the taxable property of the State; University of Michigan, tax of one-twentieth of a mill; University of Nevada, tax of one-half of a mill on the dollar of taxable property.

"The General Assembly of Indiana passed an act in 1883 providing for the permanent endowment of the university by the levy of a tax of one-half per cent. on each one hundred dollars of taxable property, to be collected annually for thirteen years. This fund, it is estimated, will amount to about three-quarters of a million dollars at the end of thirteen years, producing an annual income equal to that now received from all other sources."

The regents of the University of Iowa urge the Legislature to cause a tax of half a mill to be levied on the taxable property of the State for the creation of a permanent fund for the university.

The board of curators of the University of Missouri are seeking permanent provision in order that the university may be removed from the "pale of politics" and the Legislatures relieved from "constant importunity."

The trustees of Ohio State University ask for a tax of "one-twentieth of a mill on the grand duplicate of the State."

¹ Viz: Boston University, Harvard, Yale, University of Pennsylvania, De Pauw University; and the following State universities: Colorado, Iowa, Kansas, Mississippi, Nevada, Ohio, Tennessee, Wisconsin.

² The number does not include eighteen post-seniors and twelve students in the post-graduate course in law at the University of Pennsylvania.

³ In this estimate seventy-five post-graduate students who do not appear to be pursuing courses in advance of the usual college curriculum have been omitted from the sum total.

TABLE 45.—Statistics of Foundations Comprising Groups

	Name.	College of Arts and Science.		Schools of Science, Pure and Applied.		Graduate Department.	Professional Schools.			Total Number of Instructors without Duplication.	Total Number of Students without Duplication.	Number of Degrees Conferred in Course at Last Commencement.	Number of Endowed Professorships.	Number of State Scholarships.	
		Number of Instructors.	Number of Students.	Number of Schools.	Number of Instructors.		Number of Students.	Number of Schools.	Number of Instructors.						Number of Students.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Yale University, New Haven, Conn.	44	614	1	31	291	69	3	50	237	123	1,245	23	13	.....
2	Columbian University, Washington, D. C.	9	a205	1	15	.....	.....	3	28	322	33	543	103	1	.....
3	De Pauw University, Greencastle, Ind.	43	b769	.....	.....	.....	.....	2	7	84	50	853	73	.....	.....
4	Johns Hopkins University, Baltimore, Md.	57	189	.....	.....	.....	231	.....	.....	.....	57	420	61	0	.....
5	Boston University, Boston, Mass..	18	207	1	12	103	110	2	80	368	122	775	124	2	.....
6	Harvard University, Cambridge, Mass.	85	1,138	2	34	27	96	5	112	552	181	1,812	406	31	.....
7	Dartmouth College, Hanover, N. H.	20	229	3	25	110	0	1	15	68	60	407	120	11	.....
8	College of New Jersey, Princeton, N. J.	42	523	1	.....	.....	80	.....	.....	.....	42	663	186	.....	.....
9	Cornell University, Ithaca, N. Y..	79	915	.....	.....	.....	52	1	5	55	84	1,022	148	2	512
10	Columbia College, New York, N. Y.	49	233	1	45	228	20	2	43	1,290	131	1,863	337	1	.....
11	University of Pennsylvania, Philadelphia, Pa.	48	370	1	.....	.....	1	5	125	799	169	1,222	335	5	.....
12	Vanderbilt University, Nashville, Tenn.	23	206	.....	.....	.....	16	5	43	415	68	589	119	.....	.....

a Includes 85 students in preparatory department.

b Includes 325 students in preparatory department.

c Includes 18 post seniors pursuing advanced courses and 12 students in the post graduate course in law.

of Related Faculties, Colleges, or Schools, for 1887-88.

Number of Other Scholarships.	Number of Volumes in Libraries.	Value of Apparatus.	Value of Grounds and Buildings.	Amount of Productive Funds.	Income from Productive Funds.	Receipts for the Last Year from Tuition Fees.	Amount of State Appropriation.	Total Income.	Benefactions.	Other Schools.
16	17	18	19	20	21	22	23	24	25	26
.....	188,000	.....	.....	\$2,284,589	\$146,825	\$147,772	.....	\$501,842	\$108,843	"School of the Fine Arts" reporting 7 in the faculty and 55 students.
8	8,000	\$20,000	\$500,000	200,000	13,545	30,787	0	44,332	0	.....
.....	13,000	30,000	250,000	450,000	50,000	0	0	50,000	21,000	.....
80	35,000	152,731	675,699	3,000,000	192,000	23,480	0	215,480	0	.....
192	20,000	.....	561,890	390,575	100,000	30,000	0	130,000	.....	"College of Music" reporting 20 students.
170	325,793	750,000	4,750,000	6,519,744	311,761	269,332	.....	985,954	584,704	.....
143	68,000	100,000	200,000	850,000	43,000	17,000	0	63,000	25,000	.....
77	85,500	.....	.....	.....	.....	.....	0	.....	.....	.....
36	96,500	438,344	922,236	4,282,042	251,621	39,650	0	291,271	61,500	.....
18	93,144	520,532	1,530,000	8,788,910	233,940	143,606	0	377,546	6,000	"School of Political Science" reporting 62 students, and "School of Library Economy" 30 students.
52	60,000	150,983	1,266,807	1,404,460	44,898	128,050	.....	172,948	97,185	"Department of Philosophy" reporting 31 students, "Department of Biology" reporting 37 students, and "Collegiate course for women," 28 students.
17	15,000	100,000	500,000	900,000	63,000	36,200	0	106,700	30,000	.....

TABLE 46.—Statistics of State Universities for 1887-88.

Name.	Colleges of Arts and Science.				Number of Students in Graduate Department.				Professional Schools.				Total Number of Students without Duplication.	Total Number of Degrees Conferred in Course at Last Commencement.	Total Number of Endowed Professorships.	Total Number of State Scholarships.	Total Number of Other Scholarships.	Total Number of Bound Volumes in Libraries.	Total Value of Grounds, Buildings, and Apparatus.	Total Amount of Productive Funds.	Total Income from Productive Funds.	Total Receipts during the Last Year from Tuition Fees.	Total Receipts from State Appropriation.	Total Receipts from Other Sources.	Total Income.	Total Amount of Benefactions.
	Preparatory Department.		Undergraduate Department.		Number of Schools.	Faculty and Instructors.	Number of Students.	Total Number of Instructors without Duplication.																		
	Number of Instructors.	Number of Students.	Number of Instructors.	Number of Students.																						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1 University of Alabama, Ala.	0	0	18	216	1	1	3	21	21	238	53	0	0	0	0	10,000	\$332,500	\$302,000	\$24,000	\$1,420	0	.....	\$25,420	\$200	
2 University of California, Berkeley, Cal.	.....	.....	.....	294	11	4	59	238	100	541	103	2	0	0	0	37,500	778,000	1,700,000	184,000	0	\$82,000	0	236,000	0
3 University of Colorado, Boulder, Colo.	.....	71	8	29	2	1	8	12	16	136	5	0	0	0	0	3,000	75,000	52,157	30,602	462	.....	.....	31,664	.....	
4 University of Georgia, Athens, Ga.	0	0	10	195	.....	2	14	121	24	316	108	1	0	0	0	20,000	263,000	445,202	32,000	0	.....	.....	32,000	.....	
5 University of Illinois, Urbana, Ill.	.....	103	29	269	5	.....	.....	.....	29	377	20	0	0	0	0	17,000	460,000	450,000	23,864	9,611	26,982	.....	62,070	0
6 Indiana University, Bloomington, Ind.	3	125	27	268	5	.....	.....	.....	30	398	45	0	0	0	20	7,980	110,000	250,000	10,776	4,432	23,000	.....	40,318	.....	
7 University of Iowa, Iowa City, Iowa.	0	0	23	249	11	5	40	305	51	554	164	0	0	0	0	20,000	440,000	215,000	15,000	18,942	54,000	.....	87,942	0	
8 University of Kansas, Lawrence, Kans.	.....	172	26	169	13	2	11	73	32	483	56	0	0	0	0	10,000	510,000	70,000	8,100	3,250	46,630	.....	62,474	1,000
9 Louisiana State University, Baton Rouge, La.	0	0	11	88	0	.....	.....	.....	11	88	7	0	0	0	0	18,805	125,000	318,313	14,556	0	10,000	.....	21,556	.....	
10 University of Michigan, Ann Arbor, Mich.	.....	.....	50	729	23	5	43	925	80	1,677	382	0	0	0	0	66,912	1,045,000	550,000	62,861	72,295	54,250	\$80,768	270,174	42,000
11 University of Minnesota, Minneapolis, Minn.	.....	.....	26	335	22	.....	.....	.....	26	412	38	0	0	0	0	21,000	1,000,000	750,000	40,000	0	45,000	.....	85,600	0
12 University of Mississippi, University, Miss.	.....	35	14	162	9	1	1	23	15	229	29	0	.....	4	13,500	400,000	541,000	32,643	1,150	0	1,970	35,763	0	

13	University of Missouri, Columbia, Mo.	.....	25	520	4	2	17	80	42	623	82	0	.....	6	16,769	343,000	500,000	23,645	10,070	65,300	.....	59,015	.....
14	University of Nebraska, Lincoln, Nebr.	9	140	16	181	11	.....	.....	26	412	21	.....	.....	.....	8,000	450,000	.....	.....	0	132,750	.....	132,750	.....
15	University of Nevada, Reno, Nev.	.....	.....	4	4	0	.....	.....	4	76	.....	4	.....	.....	1,000	40,000	.....	.....	.....	.....	.....	.....	500
16	University of North Carolina, Chapel Hill, N. C.	.....	.....	15	173	4	1	2	26	17	203	21	0	.....	6	25,000	275,000	130,000	7,800	20,000	.....	34,883	.....
17	Ohio State University, Columbus, Ohio.	.....	143	26	195	.....	.....	.....	26	343	23	.....	.....	.....	8,300	870,000	537,811	32,270	5,865	19,400	24,585	82,100	19,400
18	University of Oregon, Eugene City, Oregon.	.....	123	9	23	.....	1	5	17	14	211	.....	.....	.....	2,635	77,000	210,000	9,000	4,000	5,000	.....	18,000	.....
19	University of South Carolina, Columbia, S. C.	.....	.....	16	136	13	1	1	21	16	170	31	0	.....	6	27,000	425,000	95,750	5,750	3,600	1,700	48,550	.....
20	University of Tennessee, Knoxville, Tenn.	.....	.....	17	170	4	2	18	223	25	426	98	.....	300	10,000	632,000	420,000	24,500	16,000	0	6,000	46,500	0
21	University of Texas, Austin, Tex.	.....	.....	11	177	.....	1	2	73	13	250	10	.....	.....	.....	280,000	630,322	44,713	3,240	.....	.....	47,553	.....
22	University of Virginia, University, Va.	.....	.....	18	.....	.....	2	6	200	24	391	69	5	.....	17	48,000	282,600	17,066	31,405	35,000	5,000	89,072	.....
23	West Virginia University, Morgantown, W. Va.	3	68	10	105	.....	1	2	20	14	193	6	.....	.....	5,000	110,000	107,000	6,300	300	18,000	.....	21,600	.....
24	University of Wisconsin, Madison, Wis.	.....	.....	.....	496	3	2	.....	157	63	654	59	0	.....	19	20,000	925,000	218,618	27,638	14,395	87,658	189,870	319,611

a Medical department building.

TABLE 47.—Summary of Statistics of Colleges of Liberal Arts for 1887-88.

States and Territories.	Number of Institutions.	Professors and Instructors.			In-Total Number.	Students.				Number of Degrees Conferred in Course in 1887-88.	Number of Endowed Professorships.	Number of Fellowships.			
		Number in Preparatory Department.	Number in College Department.	Total Number.		Number in Collegiate Department.		Number of Resident Graduates.					Total Number.		
						Male.	Female.	Male.	Female.				Male.	Female.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 Alabama	4	3	37	48	34 (110)	.....	453 (24)	3	1	.....	636 (182)	225	54	.....	.....
2 Arkansas	4	1	8	18	116 (382)	63	9 (218)	5	.....	.....	191 (580)	108	12	1	.....
3 California	12	30	60	235	851	78	828 (31)	116	16	10	1,730 (31)	263	111	2	.....
4 Colorado	4	.....	.....	51	98	41	41 (31)	23	2	.....	342 (972)	205	4	.....	.....
5 Connecticut	3	0	75	75	119	0	900 (64)	13	72	1	972 (138)	14	234	28	3
6 Dakota	3	16	30	73	282	100	323 (5)	36	2	0	789 (68)	162	5	0	0
7 District of Columbia	5	.....	.....	10	32	5	0	2	.....	.....	.....	72	44	1	.....
8 Florida	1	.....	.....	67	113 (210)	95	426	30	2	7	994	503	87	4	.....
9 Georgia	5	4	11	67	113 (85)	95	426	30	2	7	994	503	87	4	.....
10 Illinois	25	63	83	321	1,300	592	1,336 (59)	416	26	6	2,707 (1,808)	1,043	322	16	.....
11 Indiana	14	49	92	211	961	388	1,063 (231)	223	11	(10)	2,508	853	258	9	.....
12 Iowa	19	53	98	251	1,191	918	1,063 (231)	536	10	11	2,239	1,659	217	22	.....
13 Kansas	13	9	39	161	938	611	648 (150)	150	14	6	2,048	901	63	1	.....
14 Kentucky	13	12	54	113	469	249	719 (196)	156	38	41	1,511	477	97	9	.....
15 Louisiana	11	7	31	147	455	261	289	100	3	.....	1,497 (218)	801	35	.....	.....
16 Maine	3	0	36	36	0	0	378 (54)	54	0	0	378	54	122	9	.....
17 Maryland	9	10	81	165	467	43	611 (104)	77	243	(13)	1,677	120	104	20	.....
18 Massachusetts	7	.....	171	205	8	.....	2,085 (150)	16	16	.....	2,381 (308)	.....	605	34	18
19 Michigan	10	17	71	168	522 (138)	145	778 (150)	288	17	7	1,679	731	230	18	.....
20 Minnesota	6	5	27	86	321	180	527 (153)	153	18	5	1,930	364	92	7	.....
21 Mississippi	4	3	12	38	336	202	298	65	9	0	643	268	29	.....	.....

TABLE 47.—Summary of Statistics of Colleges of Liberal Arts for 1887-88—Continued.

States and Territories.		Number of Scholarships.		Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Funds.	Income for Year from Productive Funds.	Amount of State or Municipal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.
1	2	State.	Other.									
1	2	3	4	5	6	7	8	9	10	11	12	13
Alabama.....				24,400	\$33,350	\$25,000	\$302,000	\$24,000		\$32,565		\$200
Arkansas.....				1,800	108,000	108,000				1,959		2,900
California.....		2		81,400	120,200	1,222,000	1,875,500	191,070	\$82,000	64,100	\$53,565	1,884
Colorado.....				4,200	24,000	385,000	44,987	5,903	22,000	43,911	492,625	1,800
Connecticut.....		50		201,000	27,550	1,400,000	2,221,324	121,993		118,350	593,512	34,631
Dakota.....	0			5,200	5,200	275,000	550		56,339	350	59,520	175,596
Delaware.....		16		67,000	24,000	1,030,000	340,000	21,746	24,500	33,287	124,727	2,621
District of Columbia.....	0			1,900	200	35,000	200	12	0	2,769	2,781	3,638
Florida.....		7		37,816	117,500	605,000	573,802	39,330		10,343	81,899	3,840
Georgia.....		431		147,097	133,014	2,498,626	3,153,640	137,382		148,088	387,881	32,700
Illinois.....	23			105,280	87,900	2,270,000	1,311,000	51,595	23,000	27,667	158,126	341,108
Indiana.....		153		96,150	97,200	1,591,583	935,227	61,543	54,000	88,372	308,908	91,725
Iowa.....				43,500	19,700	1,490,000	320,000	29,150	46,630	49,373	132,930	160,400
Kansas.....		50		53,245	11,200	688,280	1,006,000	53,595		43,302	108,812	13,200
Kentucky.....		138		103,635	104,711	710,560	1,536,530	102,312	17,500	40,900	176,512	25,075
Louisiana.....		52		71,897	91,000	550,000	1,041,332	58,717		27,306	88,023	67,825
Maine.....		96		85,000	164,231	1,173,639	3,000,000	206,000	5,000	62,566	278,280	123,950
Maryland.....	6			388,131	840,000	5,950,000	7,336,744	511,538		280,396	1,021,145	8,800
Massachusetts.....		2,011		105,931	467,732	1,373,973	1,336,270	110,232	51,250	101,692	370,445	723,689
Michigan.....		3		49,300	27,669	1,727,639	1,204,632	71,923	45,000	18,112	133,890	141,000
Minnesota.....		4		101,000	423,000	549,000	33,293			5,291	43,536	245,586
Mississippi.....		63		119,978	182,925	2,433,000	1,667,200	98,871	65,300	126,941	322,571	2,764
Missouri.....		108		20,800	63,180	68,000				6,200	172,250	21,659
Montana.....				1,000			232,000	16,700	132,750			36,265
Nebraska.....				1,000	5,000	35,000	135,471		1,651	0	1,651	
Nevada.....				68,000	100,000	200,000	850,000	43,000	0	17,000	63,000	25,000
New Hampshire.....	40			110,600	10,300	450,000	700,000	38,000	15,000	7,600	60,600	8,000
New Jersey.....		10		1,500	50,000	50,000	5,000			1,500	2,000	25,000
New Mexico.....	0			314,096	830,737	5,950,556	11,746,412	333,550	150,731	1,027,696	722,574	
New York.....	6			67,173	48,200	843,500	439,000	31,550	20,000	24,683	100,913	11,900
North Carolina.....		39		266,723	331,050	4,479,686	4,502,388	379,709	44,700	235,273	855,659	485,072
Ohio.....	83			11,075	212,000	366,000		21,300	5,000	14,071	10,975	10,500
Oregon.....		30		11,400								
Pennsylvania.....		344		290,086	397,183	4,568,267	4,262,091	194,795		276,048	505,980	524,280

34	Rhode Island.....	30	65,065	890,860	47,599	0	22,904	70,879	137,227
35	South Carolina.....	17	51,600	536,150	26,800	38,300	11,291	81,790	.....
36	Tennessee.....	47	100,229	1,846,330	131,505	.....	101,637	269,587	93,450
37	Texas.....	35	9,100	809,822	46,713	1,585	29,240	69,538	81,590
38	Utah.....	.....	4,088	.....	.....	5,000	7,000	12,000	.....
39	Vermont.....	75	53,000	273,000	20,860	0	6,883	27,975	30,560
40	Virginia.....	67	116,100	1,393,894	79,739	35,000	63,961	192,100	124,000
41	Washington.....	2	5,900	900,000	1,000	5,300	10,262	18,696	4,650
42	West Virginia.....	.....	5,200	285,000	6,314	18,000	300	24,614	.....
43	Wisconsin.....	46	70,193	107,225	46,355	257,063	52,156	411,694	67,432
	Total.....	545	3,431,463	60,318,481	3,478,334	1,225,590	2,528,216	8,885,515	4,545,655

GROWTH AND PRESENT STATUS OF UNIVERSITIES AND COLLEGES.

The following is a statement of the aggregate number of universities and colleges, with instructors and students, as reported to this Bureau each year from 1878 to 1888, inclusive (1883 omitted):

	1878.	1879.	1880.	1881.	1882.	1884.	1885.	1886.	1887.	1888.
Number of institutions.....	359	364	364	362	365	370	365	345	361	357
Number of instructors.....	3,885	4,241	4,160	4,361	4,413	4,644	4,836	4,720	5,266	4,834
Number of students.....	57,987	60,011	50,594	62,435	64,096	65,522	65,728	67,642	70,024	75,333

Table 47 presents the summarized statistics of three hundred and fifty-seven colleges having a total of seventy-five thousand three hundred and thirty-three students and four thousand eight hundred and thirty-four professors.

Thirty-six per cent. of the students are in preparatory departments reported from two hundred and fifty-seven colleges. Forty-four colleges do not report the classification of their students, and fifty-six, or 16 per cent., are engaged solely in collegiate work. In this small proportion are comprised a little more than one-third of the college students of the country. The North Atlantic Division shows the largest proportion of colleges in this category.

Two hundred and fifty-eight colleges report productive funds to the amount of \$60,318,481. Thirty-five had the benefit of State or municipal aid to the amount of \$1,225,590. The total income, viz, \$3,885,515, representing three hundred and seven colleges is derived as follows: From productive funds, 39 per cent.; from State aid, 14 per cent.; and from tuition fees, 28½ per cent.

From an analysis of details given in Table 49 it appears that, considering attendance, the number of colleges reporting one hundred or more students in collegiate departments is one hundred and eighteen.

If colleges thus reported are divided into four classes, viz, those having from one to two hundred collegiate students; from two to four hundred; from four to eight hundred; and above eight hundred, the following is found to be their distribution, considering the country by geographical sections:

Number of Colleges Reporting Collegiate Students.

Division.	100 to 200.	200 to 400.	400 to 800.	Above 800.	Percent- age of total col- leges.
North Atlantic.....	25	11	4	1	66.13
South Atlantic.....	14	2	.....	.....	34
South Central.....	15	3	.....	.....	27.27
North Central.....	23	12	3	.....	24.36
Western.....	3	2	.....	.....	19.23

The following tabulation shows the limits of the number of college students to one college professor in the four classes of colleges here considered, so far as they have supplied the data:

Lowest and Highest Number of College Students to One College Professor.

Division.	College Students 100 to 200.		College Students 200 to 400.		College Students 400 to 800.		College Students above 800.	
	No. of Col- leges.	Students to one Professor.	No. of Col- leges.	Students to one Professor.	No. of Col- leges.	Students to one Professor.	No. of Col- leges.	Students to one Professor.
North Atlantic.....	20	5-22	6	4-46	3	12-17	1	13
South Atlantic.....	6	3-21	2	21-66	.....	.....	.....	.....
South Central.....	9	8-27	1	12	.....	.....	.....	.....
North Central.....	10	7-20	7	9-22	2	14-24	.....	.....
Western.....	3	9-25	1	20	.....	.....	.....	.....

Table 48 shows the distribution of the college students in classical and scientific courses so far as reported to this Office for the successive years from 1882-83 to 1887-88, inclusive.

The inquiries for the last two years have been somewhat more specific than in the years preceding, for which reason, as will be seen, three additional columns are required for the tabulation relating to them. Considering the entire period of time it will be seen that the North Atlantic Division is the only one from which the particulars have been reported with sufficient fullness to justify comparisons. Here there appears to be a slight increase in the proportion of students following the classical course.

The tabulation, it is hoped, will serve the purpose of eliciting fuller replies in the future to the inquiries bearing upon this discussion.

The detailed view of the colleges reporting to the Office for the present year is presented in notes and extracts drawn from current catalogues, reports, and other official sources, and in the statistics reported to the Office for the present year.

In the arrangement of the text the same order has been observed as in the arrangement of the tables, matter relating to the institutions included in Tables 45 and 46, preceding in each case notices of other colleges in the several States.

ALABAMA.

University of Alabama.—The following information is derived from the catalogue for 1887-88 and from other sources:

The endowment of the University of Alabama dates back to 1802, when the State of Georgia ceded to the General Government the territory which now comprises the State of Alabama. In the act of cession all the provisions of the Ordinance of 1787 regarding education were made applicable to this territory. Congress recognized the condition of this grant, and in the act for the admission of Alabama into the Union, approved March 2, 1819, reserved for the use of such seminary seventy-two sections of the public lands in the State to be "appropriated solely for the use of said seminary." The lands were designated in the land offices on the maps of the Government survey as the "university lands," and were the richest in the State. The acceptance of this trust by the State for the benefit of the university was made one of the conditions of Alabama's admission into the Union. The Constitution of 1819 made provision for the fulfillment of the obligations under the trust, as has every subsequent Constitution, including that under which the people now live.

The lands referred to were finally sold by the State and the proceeds, between seven and eight hundred thousand dollars, paid into the State treasury. The State in 1859 arbitrarily fixed the amount at three hundred thousand dollars, and assumed the payment of the interest annually.

The recent building operations have greatly increased the facilities of the university, and especially those of the scientific department.

An act was passed by Congress and approved April 23, 1884, devoting 46,080 acres of public lands in Alabama to the State for the benefit of the university.

The grant was accepted by the State, and all of the lands have been located in the mineral district. They are very valuable, and are estimated to be worth over half a million of dollars.

This generous donation of the Federal Government has enabled the university to make extensive improvements.

The president, Dr. H. D. Clayton, furnishes the following particulars as to progress made since June 30, 1887. As regards,

First. Buildings.

The following have been furnished and fitted as described:

Garland Hall, an L-shaped building three stories high completing the quadrangle. The first floor is fitted up and used as a geological museum.

The chemical laboratory, a two-story building, 40 by 60 feet, with a one-story wing 30 by 70 feet. About five thousand dollars have been expended in fitting up and supplying the interior with furniture and apparatus.

The physical laboratory, a counterpart of the chemical laboratory, having, like that, a one-story wing 30 by 70 feet. This contains a well-equipped gymnasium.

Five houses for professors' residences. These are two-story buildings, having eight rooms each and provided with suitable outhouses.

A laundry, 40 by 70 feet, with basement for boiler and machinery.

A gymnasium building, 30 by 70 feet, now being fitted up with suitable apparatus.

A brick fire-proof vault for a safe-keeping of records and papers.

A bath-house covering a clear pool twenty feet in diameter in cement walls, and a bath-room for hot and cold baths.

Second. Water-works and other improvements.

A complete system of water-works, by which pure spring water is supplied to every floor of all the buildings surrounding the quadrangle.

A complete system of sewerage extending to the Warrior River, affording drainage from mess hall, closets, and all the buildings.

A substantial and ornamental iron fence eleven hundred feet long, extending along the front of the campus.

A dairy has been added to the boarding department, the necessary quantity and best quality of milk thereby better secured.

Third. Scholastic resources.

A chair of history and a professor elected to the same.

Three thousand volumes have been added to the university library, which has been handsomely fitted up with alcove and a gallery running the whole length of the hall.

A law library of twelve hundred well-selected law books and law literature.

Spring Hill College occupies a fine site five miles from Mobile, and one hundred and fifty feet above the sea level. The plan of instruction embraces three principal courses: The preparatory of one year's duration, the classical of six years, the commercial of four years. The degree of A. B. is conferred upon students who complete the classical course and pass the required examinations. An additional year of philosophy at the college attended with success, or two years' practice in a learned profession, entitles to the degree of A. M.

ARKANSAS.

Little Rock University, chartered in 1883 under the auspices of the Freedmen's Aid Society of the Methodist Episcopal Church, affords an interesting illustration of the agencies by which learning is fostered in sparsely settled, developing communities. It is an institution for white students, comprising primary, secondary, normal, art, collegiate, and professional departments. The tuition fees are very low, aid is extended to indigent students, and every encouragement is given those who endeavor by their own labor to defray the expenses of their education.

Women are admitted to the college, and it is proposed to establish at an early date a home for girls, under the auspices of the Women's Home Missionary Society, in which ample provision will be made for a school of domestic economy.

Naturally, in the present stage of the institution, the collegiate work is small, comprising in 1887-88 only 7 per cent. of the students.

The plans for the preparatory course indicate the purpose of making this a strong and vigorous feeder for the college.

The law school has been in active operation for several years under the name of the Little Rock Law Class. The lecturers are distinguished jurists whose services are freely rendered. For the present no charges are made to the students, who represent eight per cent. of the entire enrolment of the university.

The university has a valuable property in grounds and buildings.

The Freedmen's Aid Society of the Methodist Episcopal Church also has under its auspices Philander Smith College for the colored race.

CALIFORNIA.

University of California.—In 1887 Dr. Ed. S. Holden resigned the presidency of the University of California, Berkeley, which he had held for two years, to assume his duties as director and chief astronomer of the Lick Observatory.

On the 23d of March, just twenty years from the day on which the law establishing the university was passed, Dr. Holden's successor, Horace Davis, was inaugurated.

Naturally the event became the occasion for recalling the high purposes which were impressed upon the university at the outset, and for reviewing the work accomplished.

In his address on behalf of the faculties, Prof. Martin Kellogg reminded his hearers that the old College of California had maintained a high standard of classical training before it was merged into the university, and when it lost its separate existence "it obtained a guarantee for a classical course equal in grade to the courses of the best Eastern colleges."

Side by side with this classical course the university has maintained the science and technical courses of recognized excellence, while, as pointed out by President Davis, students who care for neither classical training nor technical knowledge may avail themselves of "the literary course, which affords a generous education in English literature and the modern languages, fitted to make broad-minded, cultivated men and women." Of this course President Davis said in his inaugural address: "The proof that it meets the needs of the time and place is the number of students following the course, larger than those pursuing any other branch of study in the undergraduate department."

The Lick astronomical department added during the year will be an element of strength to the university and can not fail to increase its renown.

The director has assurance of five thousand dollars. The working force numbers beside himself four astronomers and one assistant astronomer.

By the action of the Legislature, February 14, 1887, the university is freed from the evils of uncertain income. On that day the bill was passed providing for the levy on each hundred dollars of taxable property in the State a tax of one cent for the support and improvement of the State University. It is estimated that the revenue thus assured will amount to about seventy-five thousand dollars, with the prospect of speedy increase to one hundred thousand dollars annually. Together with the previous endowments of the university it gives an immediate income of above two hundred thousand dollars, surpassed by six institutions only of the entire number included in Tables 45 and 46.

The College of California, which was merged into the university, began its work in

1860. Including the alumni of this college, the university now numbers five hundred and fourteen graduates exclusive of those from the professional schools.

Pierce Christian College, College City, was founded and partially endowed by funds arising from the sale of land given to the Christian Church by the will of Andrew Pierce, Esq. The institution is entirely out of debt; the original endowment has been considerably increased by the gifts of its friends and there is promise of still further additions.

One peculiar feature of the place is that no intoxicating liquors are sold, and no gambling houses are allowed in the village or on the estate. Every deed given to any part of the estate, formerly belonging to the college, includes a clause prohibiting the traffic in spirituous or malt liquors. To make the clause more effective, the friends of the school procured the passage of a bill by the Legislature prohibiting the sale of liquors within one mile of the college.

Civil engineering has been taught in the college for the last two years, and now a full course has been arranged, leading to the degree of civil engineer.

The buildings were enlarged during the summer of 1887.

Napa College, Napa City, was chartered June 5, 1885, "to provide an institution of higher learning, where young men and women may receive a complete scientific, literary, and classical education." It is under the supervision of the California Annual Conference of the Methodist Episcopal Church to insure Christian direction; but it is not sectarian in its teachings nor requirements.

The facilities and accommodations of the college have been greatly increased during the past year, about eleven thousand dollars having been expended in the work.

As less than three years have elapsed since the institution received its charter, the work in the college courses has only begun.

The endowment of *The Leland Stanford Junior University, Palo Alto*, was noted in the Commissioner's Report for 1884-85. On the 14th of May, 1887, the corner-stone of the university building was laid with appropriate ceremonies.

Work upon the same is being pushed as rapidly as is possible for such an undertaking, and it is designed to have the ceremonies of dedication take place on the 14th of May, 1889, the twenty-first anniversary of the birth of Leland Stanford, Jr.

COLORADO.

The University of Colorado, Boulder, owes its endowment to the combined action of private individuals, Congress, and the State Legislature.

The catalogue for 1887-88 gives the following summary of the early action in its interests:

The University of Colorado was incorporated by an act of the Territorial Legislature of 1860, and the location fixed at Boulder. In 1871, three public-spirited citizens donated to the University fifty-two acres of land adjoining the city, valued at five thousand dollars. In 1874 the Territorial Legislature appropriated fifteen thousand dollars, and the citizens of Boulder contributed a like sum in cash. In 1875 Congress set apart and reserved seventy-two sections of the public lands for the support of the State University. In 1876 the Constitution of Colorado provided that upon its adoption the university at Boulder should become an institution of the State, thus entitling it to the lands appropriated by Congress, and further made provisions for the management and control of the university. The first General Assembly of the State made provision for its permanent support by a levy of a tax of one-fifth of a mill upon the property of the State; also for a fund to be secured by the sale of lands donated by the United States.

The cabinet and laboratory equipments of the university are excellent. Its library was founded by C. C. Buckingham, of Boulder. The regents have appropriated one thousand dollars for additions to the library during the present year, which sum has been increased to twelve hundred dollars by the liberality of Mr. Buckingham.

CONNECTICUT.

Yale University.—In his report for the year ending July 1, 1887, President Dwight calls attention to the change that has taken place in the official relations of the president on account of the development of the various schools now forming the university. "In consequence of this development," he says, "it has become very desirable, and even necessary, that the one who fills the office of president should no longer be, as heretofore, an officer and instructor in the collegiate department only, with secondary and almost nominal relations to other departments, but a member of every faculty, having equal interest in the work and life of every branch of the university. With a sense of the importance of this change in the official relations of the one who presides, the president, immediately on beginning his work, gave his attention to the affairs of all departments, and considered it his duty and privilege to be present at the meetings of the several faculties as well as to co-operate with them as far as possible in promoting the welfare of the schools under their special charge. The advantage of such meetings and

co-operation has already been manifest, it is believed, in the greater unity of the institution, and in the confidence on the part of all that the several sections of the university are to grow in harmony towards the more perfect development of the university life. The demand made upon the time and thought of the president by this great enlargement of his official duty deprives him of the opportunity of meeting the students in the lecture or recitation room as frequently as his predecessors were able to do. The impossibility referred to was so appreciated by the corporation at the time of the election of the new president that a vote was passed releasing him from all obligation to give instruction in the academical department."

Under the conviction, however, that the president of a university should not be "simply a man of affairs," but should, in some way, "come into intellectual contact with the members of the student community," President Dwight gave instruction in the theological department in 1837, meeting the students four or five times a week, and proposed for the present year, viz, 1838, to meet the academical students in the lecture room at least once a week.

In the same report President Dwight says: "The provision for the teaching force in the university is the most central and important thing in the university life. Those who have graduated at Yale College, and all who are interested in its welfare and its future, may fitly be asked to consider its needs in this regard."

Among measures affecting the scholastic work of the department of philosophy and arts, the president notes in his report for 1837 the following: In the requirements for admission to the Freshman class in the college the amount of Greek and Latin, which was diminished somewhat a few years since in consequence of a provision with respect to modern languages not previously enforced, is by vote of the corporation to be made the same as in earlier years after the year 1837. The requirements in Latin will include four books of Caesar's Gallic War instead of three, and in Cicero, in addition to the orations against Catiline and for Archias, either the Marcellus and the Fourteenth Philippic, or the Milo, or the Manilian Law, or the Cato Major; and in Greek they will include four books of Xenophon's Anabasis, instead of three, and three books of Homer's Iliad, instead of two.

In May, 1836, Prof. William R. Harper was appointed to the professorship of Semitic languages, and began his work in the same the following September, offering courses in Hebrew, Assyrian, Arabic, and Aramaic. These courses awakened great interest, and in connection with them so much duty was imposed upon the professor, that, in view of the demands already made upon his time, and the greater ones which seemed likely to arise in the coming year, a friend of the university generously offered to provide the means for paying the salary of an assistant in these branches of study during the year 1837-38. Dr. Robert F. Harper was selected for this position. The foundation for this professorship of Semitic languages has been, as yet, only partially secured. It is hoped that the endowment may be soon completed in order that this professorship may rest upon a permanent basis.

The courses offered in political science were also enlarged in 1837. The three gentlemen who were appointed lecturers in connection with these courses for the year specified, Mr. Edward V. Reynolds, Mr. Henry C. White, and Mr. Edward G. Browne, were invited to continue their work during 1837-38.

In the spring of 1837 a special course of lectures on protection was given to the students by Prof. R. E. Thompson, of the University of Pennsylvania, for which provision was made through the generosity of several friends of the university.

In the report from which the foregoing particulars are derived, viz, that for the year ending July 1, 1837, President Dwight makes mention of the following new buildings, completed or in progress, for which the university is indebted to generous friends: Dwight Hall, a building erected for the religious interests of the university, and for the Christian work of the young men among themselves, was completed and consecrated in the fall of 1836. The opening of the college year 1836-37 also witnessed the completion of a new dormitory building named in commemoration of Mr. Thomas G. Lawrence, a member of the college class of 1834, who died soon after the beginning of his senior year. The gift of fifty thousand dollars for this building was offered to the college by the mother of Mr. Lawrence, and the building itself was very nearly completed before the close of Dr. Porter's administration.

To the history of the same administration belongs, also, the provision for the Kent laboratory. Mr. Albert E. Kent, of the college class of 1853, offered seventy-five thousand dollars for the purpose of providing for the college a new chemical laboratory, which sum was placed in the hands of the treasurer, partly before and partly after the beginning of the college year 1836-37. Unavoidable delays, however, prevented the beginning of the work of erecting the building until late in the spring of 1837. It is expected that it will be ready for occupancy early in 1838.

In January, 1887, Hon. Simeon B. Chittenden, of Brooklyn, N. Y., offered to give one hundred thousand dollars for the purpose of providing a new building for the University Library, which may furnish additional accommodation for the constantly increasing demands of the library, while the present building shall remain, and may ultimately be a part of an extended building, or pile of buildings, devoted to the University Library of the future.

In accordance with the terms of this gift, the largest ever made for the University Library, plans have been completed and the work of building begun.

In the summer of 1887 another generous friend offered the sum of at least one hundred and twenty-five thousand dollars for a building to be used for lecture and recitation rooms. The benefactor who proposes to provide this building desires to make it one of the finest in its architectural effect on the college square, and to have it occupy the most conspicuous site.

The work of building has begun, and will be completed at as early a date as practicable.

Trinity College, Hartford, while maintaining the standards that have characterized it in the past, has made due provision for the demands that are peculiar to the present time. In 1884 three new courses were established, two of which lead to a degree in science. Electives were also introduced in the junior and senior years of the several courses.

The college is distinctively Christian in its character. The first recitation on Monday morning throughout the college is devoted to religious studies. These comprise the following subjects: The New Testament in Greek; Old and New Testament History and Biblical Literature; Natural Theology; The Foundations of Religious Belief; The Evidences of Christianity; The Historical Coincidences and Evidences of the Holy Scriptures.

The new gymnasium was completed in 1887 and the Jarvis Hall of Science the present year. The building and equipments have cost upwards of fifty thousand dollars, which have been contributed in various sums, ranging from five to thirty thousand dollars.

Wesleyan University, Middletown, has neither professional nor technical departments, its resources being applied solely to the maintenance of a college of liberal arts.

From 1873 to 1886 the course of study remained without change, except in unimportant details. In the latter year the board of trustees gave their approval to a recommendation of the faculty looking to a revision of the curriculum. The principal objects aimed at in the revision as set forth in the University Bulletin are as follows:

(1) The introduction of modern languages and natural science at an earlier period of the course—a change rendered possible by a slight reduction in the amount of required Latin, Greek, and mathematics.

(2) The bringing of the requirements for admission to the Latin-scientific and scientific courses more nearly to an equality with those for the classical course, by including in the requirements for the former courses a knowledge of French or German.

(3) The re-arrangement of the curriculum with a view to bringing (so far as practicable) each study common to all three of the courses into the same year.

(4) A slight diminution of the amount of class-work required of the seniors, in order to allow more leisure for special-honor work and other forms of collateral study.

As now constituted the curriculum may be taken to illustrate the prevailing conception of the proper scope of college training. For this reason a somewhat extended outline of the several courses, as given in the catalogue for 1887-88, is here presented:

The college presents to its undergraduate students the option of three parallel courses of study, each extending through four years, and named respectively the classical course, the Latin-scientific course, and the scientific course.

In the classical course the study of Latin and Greek forms a large part of the required work of the first two years. In the Latin-scientific course Greek is omitted, and in the scientific course both Greek and Latin, in order to give more extended opportunity for the study of modern languages, science, and literature.

Required and elective studies.—In each of the above courses all of the studies of the first year are required, except that the classical and Latin-scientific students have the option between French and German. In the three remaining years the amount of required work is progressively diminished, the student being allowed to complete his quota by selecting from a wide range of elective studies.

In the choice of these electives the student is advised to exercise prudence and deliberation, and especially to regulate his choice so that his electives will together form a harmonious and symmetrical course of study; and in no case is a student allowed to select a study which he is not, in the judgment of his instructors, qualified to pursue with advantage.

The following is a tabulated view of the distribution of required and elective studies in the three courses:

	Classical Course.		Latin-Scientific Course.		Scientific Course.	
	Required.	Elective.	Required.	Elective.	Required.	Elective.
Ancient languages.....	22	20	7	12	.....	.....
Modern languages.....	24	16	24	13	13	4
Rhetoric and English literature.....	4	11	4	12	4	12
Logic, psychology, and ethics.....	8	8	8	8	8	8
History and political and social sciences.....	5	8	5	8	5	8
Mathematics.....	9	8	9	8	2	9
Physics and astronomy.....	8	20	8	21	8	21
Chemistry.....	3	12	4	12	4	17
Biology.....	3	15	6	12	6	13
Geology, mineralogy, and physical geography.....	4	10	5	8	5	8
Percentage of work required of each student in four years.....	70	.....	60	.....	55	.....
Percentage of elective work.....	.....	30	.....	40	.....	45

^aOption is allowed between French and German. If these should therefore be counted as elective, the percentage of studies required in the classical and Latin-scientific courses would become 66 and 56, respectively.

The distribution of the required and elective work in each of the four years is shown in the following table:

Year.	Classical.		Latin-Scientific.		Scientific.	
	Required.	Elective.	Required.	Elective.	Required.	Elective.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Freshman.....	84	216	83	217	100	0
Sophomore.....	84	16	53	47	69	31
Junior.....	53	47	53	47	17	83
Senior.....	28	72	28	72	23	72

^aOption between French and German, one of which is required.

DISTRICT OF COLUMBIA.

The Columbian University.—The Columbian College, a department of the university of the same name, has its course of instruction arranged in seven schools. These are so grouped as to form three courses, leading respectively to the degrees of bachelor of letters, bachelor of science, and bachelor of arts.

The candidates for the first named must obtain diplomas in the schools of English, Greek, Latin, modern languages, and philosophy, and receive a certificate of proficiency in the school of mathematics or of natural science.

For the degree of bachelor of science candidates must obtain diplomas in the schools of English, modern languages, mathematics, natural science, and philosophy.

For the degree of bachelor of arts diplomas must be obtained in any six schools, and a certificate of proficiency in the remaining schools of the entire course.

The Corcoran Scientific School, established by the trustees and overseers of the Columbian University as a part of their university system of education, is called by the name of W. W. Corcoran in respect for his exalted character and in grateful recollection of his many benefactions to the university.

Provision is made in this school for general and for special courses of study.

The former embraces schemes of studies in literature, science, and technology, leading respectively to the degree of bachelor of science, of civil engineer, mechanical engineer, mining engineer, etc., according to the scope and quality of the studies prescribed for each degree.

Under the head of special courses of study, whether considered with reference to single studies or to arts embracing with specific studies a certain component part of the general course, provision is made for instruction in practical astronomy, geodesy, electrical engineering, architecture, analytical chemistry in all its branches, metallurgy, assaying, drawing in all its branches, etc.

To accommodate students engaged in the Executive Departments or in other work the exercises of the school are held in the evening, from 6 to 10 o'clock.

The Catholic University of America.—For the following account of the Catholic University of America the Office is indebted to one of the directors of the same. This latest but not least of America's universities was originated in the third plenary council (Catholic) of Baltimore in the year 1884. It is the realization of the most earnest wish of the hierarchy and laity of the church in America, as expressed in previous councils and in the highest Catholic thought for years. The desired consummation was brought about at this time by the providential and munificent gift of Miss Mary Gwendolen Byrd Caldwell, offered to the bishops of the above-named council for the founding of a Catholic university in the United States. The council, after mature deliberation, accepted the offer, and pledged itself to the establishment of such an institution as soon as possible. Washington, D. C., was chosen as the most suitable location, and accordingly a site was soon selected alongside of the Soldiers' Home park, a few miles distant from the centre of the city. The cornerstone was laid in the presence of an immense concourse of people, among whom were the highest representatives of church and State, by His Eminence Cardinal Gibbons, of Baltimore, on May 24th, 1888. The building, an immense granite structure 266 feet long, with two return wings 56 feet by 45 feet, and a pretty chapel in rear of the centre section, is rapidly advancing to completion, and is expected to be roofed by January, 1889. This great progress on the work will allow the opening of the Divinity Hall for students in November, 1889, according to the announcement of the directors. The other departments of science, medicine, literature, law, etc., will be added immediately to that of divinity. The university will not be a mere college, but its course of studies will be post-graduate in all its departments, giving the highest education, the fullest intellectual development to clergy and laity in their chosen callings. The Catholic Church in founding this new university proposed to establish a perpetual institution, not merely to uphold and strengthen the law of God, the Creator and Redeemer of the human race, but also to shed lustre on religion, by supplying it with proofs, clearer and clearer every day, drawn from sacred and profane learning, and the successive discoveries resulting from investigations by men of genius. And, furthermore, the university is intended to furnish young men with such training in mind and character as will best qualify them to contribute in the capacity of citizens to the honor and defence of their country.

The board of directors is composed of the following distinguished gentlemen: James (Cardinal) Gibbons, archbishop of Baltimore; John J. Williams, archbishop of Boston; P. J. Ryan, archbishop of Philadelphia; M. A. Corrigan, archbishop of New York; John Ireland, archbishop of St. Paul; John L. Spaulding, bishop of Peoria, Ill.; John J. Keane, bishop of Richmond; Martin Marty, bishop of Dakota; C. P. Maes, bishop of Covington, Ky.; John S. Foley, bishop of Detroit; Killian C. Flasch, bishop of La Crosse, Wis.; John M. Farley, domestic prelate, New York; P. L. Chappelle, D. D., Washington; Thomas S. Lee, rector of the Cathedral, Baltimore; Eugene Kelly, New York; Michael Jenkins, Baltimore, and Thomas E. Waggaman, Washington, D. C.

Cardinal Gibbons is president of the board; Mgr. John M. Farley is secretary; Eugene Kelly is treasurer; Right Rev. John J. Keane, D. D., is rector of the university, and Rev. Philip J. Garrigan, D. D., is vice rector. The university was incorporated November, 1885.

Georgetown College.—The centennial of Georgetown College will be celebrated February 20, 21, and 22, 1889. The near approach of this interesting event gives special interest to a historical review of the college for which the Office is indebted to J. F. Dawson, S. J.

The account will be embodied in the forthcoming monograph on the history of education in the District of Columbia. It is proper to note here that the first building of the college was erected in 1789, and the first president, Rev. Robert Plunkett, entered upon his duties in October, 1791.

May 1, 1815, Congress gave the college a university charter giving it power to confer degrees in all the faculties. The medical department was established in 1851 and the law department in 1870.

The curriculum of the college agrees in its arrangement and scope with that of many Catholic colleges of the country.

The following statement, taken from Mr. Dawson's paper, shows very clearly the conception of intellectual discipline and development upon which the curriculum is based:

"The present course of studies at Georgetown is that generally pursued in the colleges of the Society of Jesus, and, including the preparatory department, extends over a period of seven years. The plan of studies is based on the idea that a complete liberal education should aim at developing all the powers of the mind, and no one faculty at the expense of the others. During the first part of the course the memory receives the principal share of attention, the student being engaged in mastering the rudiments of Latin, Greek, and mathematics, and in acquiring accuracy in the use of his native tongue. As the pupil advances the judgment is more and more exercised, by means of translations

from one language into another, and by the study of mathematics, while less attention is given to mere memory work. When the student is able to read Latin and Greek with some facility, he devotes himself for a year to the cultivation of his literary taste, by reading the best models of ancient and modern literature. The following year is given to the training of the imagination; the nature of poetry is explained, the technicalities of verse-making are mastered, and the great poets are carefully studied. Then comes the year of rhetoric, during which the student's critical powers are exercised and developed; poets and prose writers are scientifically analyzed, the principles of oratory are carefully examined, and the speeches of the world's greatest orators are read and discussed. The last year of the course serves to discipline the reasoning faculties by the study of logic, metaphysics, and ethics, and by continuing mathematics and natural science, which were already begun in preceding years. During this year great attention is given to metaphysics, and a thorough knowledge of it is regarded as of the utmost importance, since it serves to arrange all the student's knowledge systematically, and gives him the ability to grasp firmly the principles of any special study to which he may wish to devote himself.

"This course is calculated to develop and train all the powers of the mind, rendering it able to understand and appreciate all branches of learning. It serves as a foundation for special training in any branch which the student, with his mind matured and trained, may decide to take up.

"The same course is obligatory on all; to render it elective would be to defeat its very end and aim, for the student, before his mind is developed, cannot judge what studies will be most beneficial to him.

"While adhering to her ancient principle with regard to the method of her training, Georgetown College has kept pace with the times in adopting new branches of study or developing old ones, as the changes of the age require. She watches these changes with a keen eye, and while jealously guarding the stores of the past, she will not suffer her students to be deprived of the more glittering treasures of modern culture. Whatever is important in natural science is taken into her courses and taught with a philosophical analysis intended to guard the student against that confounding of mere information with learning, which is the danger of modern education. Physics, mechanics, general and analytical chemistry, and geology, all form important parts of the regular obligatory course of studies. Physics and chemistry are the subject of laboratory instruction. Observation and investigation in natural history are encouraged by a scientific society among the students and by the Toner medal. As yet there are no professional schools of natural science in the university, instruction in these branches being only that which is supposed to be desirable for the completion of a perfect general education, such as a highly cultured man of any profession would wish to possess.

"As soon as the means of the university permit, she will establish professional schools of the various branches of science."

Gonzaga College has an interesting history, dating back to 1826, when it was known as "Washington Seminary" and enjoyed a high reputation as a classical school. The present name was first used in 1848.

The college became so prosperous that it even aspired for a while to the rank of a university. During the last quarter of a century it has experienced various vicissitudes. It is at present in a prosperous condition. The course of studies in the regular college curriculum supposes a period of seven years, but this period is often shortened by a year or two when the quickness or the industry of the student warrants the faculty in advancing him for his literary merit.

Departments are also maintained for the pursuit of the studies that are deemed best fitted to prepare students for commercial life.

The National Deaf-Mute College is the only institution in the country where the deaf can secure collegiate training. It makes provision for thorough instruction in the essentials of a liberal education without attempting to do the work of the polytechnic schools on the one hand or that of the university on the other. The course of higher instruction leading to collegiate degrees occupies four years and embraces courses in (1) languages, ancient and modern; (2) mathematics; (3) natural science; (4) history, and (5) philosophy and political science.

Prior to 1887 several applications for admission had been received from young women, and it was urged from influential quarters that there was injustice in excluding them from the privileges they sought. After careful consideration it was determined to open the college to women for two years as an experiment.

No suitable accommodations for them being available, the president offered to give up the use of the greater part of his residence for this purpose, providing a home for his family elsewhere.

Six young women, representing the States of Illinois, Pennsylvania, Maryland, Nebraska, and Indiana, presented themselves early in 1887, and were admitted to the introductory class of the college.

DAKOTA.

The University of North Dakota, Grand Forks, received its charter in 1883 and was opened for the reception of students in 1884.

Four college courses are offered, viz: The course in arts, the course in science, the course in letters, and the normal course. In the absence of suitable fitting schools in the Territory from which the patronage of the university must chiefly be drawn, it has been found necessary to provide instruction temporarily in subjects preparatory to those pursued in the university proper. The work of this department is entirely foreign to the scope of a true university, and it is strongly urged upon the high schools of the Territory that they prepare themselves as speedily as may be to relieve the university of all instruction of a preparatory nature.

The university has no income other than the Territorial Legislature appropriation, which is made biennially. In the session of 1887 the appropriations were as follows: For professors' salaries for two years, twenty-five thousand dollars, there being at the time an unexpended appropriation of a former Legislature to the amount of five thousand dollars; for museum, library, physical, chemical, and scientific apparatus, fuel and lights, engineer, fireman, janitor, and incidentals, thirty-one thousand dollars. The secretary of the board of regents is paid in addition by the Territory twelve hundred dollars a year.

The studies of all regular students, except those in the normal department, are identical during the three preparatory years, and also during the Freshman year. Differentiation begins at the beginning of the Sophomore year, at which time the students elect among the three courses.

The president, Homer B. Sprague, writes as follows: "We differ, I think, from all other American institutions in requiring one (and only one) year of Greek in preparation for every course except the normal. That is, all regular students, except the normal, must take a year of Greek; but the non-essentials in Greek are omitted."

The University of Dakota, Vermillion, was made the subject of legislation as far back as 1862, when it was located at Vermillion. In 1881 seventy-two sections of land were granted to Dakota, selected, and withdrawn from sale as directed and approved by the Secretary of the Interior, "for the use and support of a university in the Territory when it should be admitted as a State in the Union."

In the spring of the same year persons interested in the cause of education met at Vermillion and formed an association for the erection of a building to be used for university purposes.

At a special meeting held by the voters of Clay County, March 13, 1882, it was voted to raise the sum of ten thousand dollars to aid in the construction of the university building, and also to build one of Sioux Falls granite, 48 by 62 feet, two stories high. This, which is now the west wing, was erected with the proceeds of the Clay County bonds.

This liberal act was the year after the total destruction of Vermillion by the great flood of 1881.

In 1883 the university received its charter, and in September of the same year began its work.

The university building is a fine structure of Sioux Falls granite. The grounds comprise twenty acres, the gift of Hon. J. P. Kidder and Hon. M. J. Lewis.

A good beginning has been made toward supplying a library and scientific apparatus suitable for an institution of high grade.

The departments of the university are preparatory, normal, collegiate, musical, and commercial. The collegiate offers three parallel courses,—the classical, the literary, and the scientific. Its first class graduated June, 1883.

GEORGIA.

The University of Georgia, Athens, comprises the academic department known as Franklin College, the State College department, law and medical departments, and four branch agricultural colleges in different sections of the State.

The three first-named departments are situated at the ancient site of the university in Athens; the medical department is in Augusta.

Franklin College offers three courses leading respectively to the degrees of B. A., B. S., and B. Ph. The course for each degree is prescribed, the student having only the privilege of choosing the degree for which he will study.

The State College offers courses in agriculture, engineering, and applied chemistry. All

students of the State College and of Franklin College, unless exempted by the faculty, are required to take part in the regular military drills, which are conducted thrice in the week.

The students have access to the college library, containing above thirteen thousand volumes; to the Gilmer library, a collection of about one thousand volumes, bequeathed to the university by Gov. George R. Gilmer, and to two society libraries.

As regards facilities for science instruction, the university is not excelled by any institution of the South.

The laboratory presented to the State College by the city of Athens is a building of three stories and basement, having a ground plan of 100 by 50 feet. Its cost was twenty-five thousand dollars.

In 1881 Hon. Joseph E. Brown established at the university, in memory of his son, an endowment known as the Charles McDonald Brown Scholarship Fund. This is a fund of fifty thousand dollars, the interest of which is to be loaned, under specified conditions, to worthy young men, who unaided could not acquire a liberal or professional education.

Bowdon College, Bowdon, is situated in a forest country thirty-six miles from any railroad.

It represents an endeavor to bring the means for advanced instruction within the reach of the humbler classes, and all expenses are placed at a very low figure.

Young men and women are admitted on the same terms.

Emory College, Oxford, is one of the best known colleges of the South.

In addition to the college, classical, and scientific courses, it maintains a department of book-keeping, a school of telegraphy, and a school of technology, which offer unusual advantages to those who desire preparation for practical business life.

In order to cheapen the expenses of living for worthy, ambitious young men, who must work their way through their course of study, the college, so far back as 1876, began in a little six-room cottage, the experiment of procuring cheap board for those who needed it. In the fall term of that year ten young men began housekeeping in the rented house. For three years the experiment was conducted in that cottage. The results proved conclusively that cheap and good board was in the reach of poor boys, and that in health, morals, social standing among students and citizens, and in scholarship, the hall boys ranked with the best. As a consequence the accommodations were increased and now comprise the largest and best house in Oxford.

From the beginning until the current college year, not less than four hundred young men of limited means have found in the "Helping Halls," as they were called, the solution of their problem, and have been enabled to take a full or partial college course. Every year the "Hall" men have won distinctions, class honors, prize medals, or literary society positions. In 1883 the four honor men were "Hall" men.

Peculiar advantages are offered to young men who are preparing for college, through the facilities offered by Seney Hall, the gift of a gentleman of New York, for whom it is named.

ILLINOIS.

Of twenty-four scholastic institutions of Illinois, included in Table 49, five are designated as universities. Four of this number and five others, styled simply colleges, report professional schools or departments. All of these have preparatory departments, business courses, and normal courses, while special schools or departments of art and music are reported by the great majority.

Twenty of the number are in recognized affiliation with some one of the religious denominations. The majority of these owe their existence and whatever they possess in the way of permanent endowment to that zeal for learning which has been characteristic of the Christian Church in America.

As a rule the year's record of these colleges and universities presents no unusual feature, the information received being fully presented in the tabulated details.

The Illinois Wesleyan University, Bloomington, calls special attention to its laboratory facilities. During the past two years more than thirteen hundred dollars have been expended in adding to the efficiency of these rooms. It is intended to fit up a biological laboratory by the opening of the next term. When this is completed the opportunities for original work in the natural sciences offered by the university will, it is said, be unsurpassed by any institution in the State.

North-Western University, Evanston, comprises a preparatory school, college of liberal arts, a woman's college, departments of music, art, and elocution, three theological schools, a college of medicine, and a college of law.

It reports an endowment fund of \$1,785,255, of which \$1,485,255 are accredited to the college of liberal arts. A large part of the fund is as yet unproductive.

The Dearborn University, presided over by Prof. George W. Hough, A. M., is the astronomical department of the university. In 1887, through the liberality of the astronomical

society of Chicago, the university came into possession of a great equatorial refracting telescope, made by Alvan Clark & Sons in 1861. J. B. Hobbs, Esq., formerly president of the Chicago Board of Trade, contributed the funds for a new observatory. The best plans have been employed in the construction of the building, which will soon be ready for occupancy.

The university is encouraging young men and women to seek thorough preparation for its college course by the offer of scholarships available for graduates of Cook County high school who successfully pass a competitive examination.

Abingdon College has united with Eureka College, at Eureka. The educational work of the Society of Disciples or Christians is thus concentrated, with the promise of a more vigorous work than could have been carried on by the separate colleges.

Knox College, Galesburg.—The semi-centennial celebration of Knox College, which occurred in 1887, has had a stimulating influence upon the college. The standard of admission to the scientific course has been raised so much as to require an additional year of preparation, and French has been made optional for two years of the course.

Arrangements have been completed for the erection of an astronomical observatory in the college campus, a superior telescope has been secured, and the services of a distinguished astronomer engaged.

Military drill, introduced in 1884, has proved a most important addition to the facilities offered by the college for physical training.

Knox Seminary for young ladies is a department of Knox College. The course of study occupies four years, and offers facilities for thorough mental discipline and liberal culture. It is planned with reference to the ordinary duties of intelligent, educated women, and to the special requirements of those who desire to teach.

The college courses, classical and scientific, are also open to young ladies.

Lake Forest University, Lake Forest, comprises an undergraduate department located at Lake Forest, and professional departments located partly at Lake Forest and partly in Chicago. The undergraduate department includes four distinct schools, Lake Forest College, Ferry College for Young Ladies, Ferry Hall Seminary, and Lake Forest Academy. The professional departments comprise a philosophical faculty located at Lake Forest, and a medical faculty located for the sake of clinical and hospital practice at Chicago. The philosophical faculty has in charge the post-graduate courses intended to give preparation for the profession of teaching, for journalism, and other literary work. The medical faculty forms two distinct schools, Rush Medical College and the North-Western College of Dental Surgery.

The university faculty has recently been increased, the buildings improved, and the courses of study more fully developed and systematized.

Ferry Hall for Young Ladies has been raised to the college standard, and its accommodations and facilities greatly increased by additional buildings representing a value of sixty thousand dollars. Examinations for admission to the college departments of the university are held in the chief cities of the West.

Association of College Presidents.—The Illinois School Journal for February, 1888, states that at a meeting held in Springfield, apparently in January, an association of college presidents and professors was organized by calling Prof. J. C. Hutchison, of Monmouth College, to the chair, and appointing G. R. Cutting, of Lake Forest University, secretary. A committee appointed at Chicago the preceding season recommended a permanent organization, and presented a constitution, which was adopted. Officers for the ensuing year were chosen, and twenty-two presidents and professors of colleges joined the association, which was made a section of the State Teachers' Association.

INDIANA.

Table 49 gives the statistics of fourteen institutions of Indiana. Of these, three are designated as universities; two of the three comprise colleges of liberal arts and professional schools.

The Indiana University, Bloomington, has a large and able faculty, and maintains a vigorous work. The appliances for scientific instruction have been materially increased during the year.

In 1883 the General Assembly of Indiana passed an act providing for the permanent endowment of the university by levying a tax of one-half cent on each one hundred dollars of taxable property, to be collected annually for thirteen years. This fund, it is estimated, will amount to about three-quarters of a million dollars at the end of the thirteen years, producing an annual income equal to that now received from all other sources.

De Pauw University, Greencastle, is organized on the basis of an English rather than that of a German university, consisting of an assemblage of schools, clustering around a regular "College of Liberal Arts." Under one charter there are included a college, a school of theology, a school of law, a school of didactics, a school of music, a school pre-

paratory, a military school, etc., each one of which is distinct in faculty and autonomous in management. The chancellor's position is mostly advisory, and the president is the real and active head of the whole university; and their names, therefore, stand as such at the head of each faculty. That is, the chancellor and president being chancellor and president respectively of the whole university, are chancellor and president of the several parts, *i. e.*, of the college and each of the several schools. The dean of a school is the president of that particular school, under the president of the university and its chancellor as superior officers.

The large endowment derived chiefly from the gifts and bequests of the late Hon. W. C. De Pauw has placed the university upon a sound financial basis. The productive fund, which is now estimated at four hundred and fifty thousand dollars, will be largely increased when the whole amount bequeathed by Mr. De Pauw becomes available.

The needs of the university as regards libraries, apparatus, and buildings are constantly urged upon its friends and patrons, and the determination is manifest on the part of the trustees to develop here an institution of a very high order.

The year under review has been marked by a large attendance and earnest work on the part alike of students and professors.

Wabash College, Crawfordsville, which has just completed its fifty-fifth year, shows a steadily increasing patronage.

The course of undergraduate study extends through four academic years, and leads to the degree of bachelor of arts in the classical department and to the degree of bachelor of science in the scientific department. The classical course does not differ essentially from that of the best American colleges, while the scientific course is provided for students who prefer the modern languages, especially German, and desire a more advanced knowledge of the sciences. Both departments include two classes of studies, the required and the elective, attendance upon which is obligatory.

Attention is called to the reduction of tuition recently made by the trustees. From careful calculations it appears that the expenses of a student in the collegiate department may be met from one hundred and sixty-six dollars a year.

The college possesses four beneficiary funds, available for worthy students. By an agreement between the Legislature of Indiana and the trustees of the college each county of the State received a scholarship, entitling its commissioners to appoint a student for five years on free tuition. The commissioners of twenty-three counties are still entitled to appoint students on the "county scholarships."

In order to stimulate the students of the State to strive for thorough scholarship, the board of trustees has also ordered that a free scholarship be awarded to each male graduate of good character from any high school or classical school in Indiana, who, at his graduation, shall receive a certificate that he is the best male scholar of his class. This certificate must be presented to the treasurer of the college as soon as the student enters. The holder of such scholarship is exempt from all college charges, and is admitted without examination to the Freshman class.

The endowment of *Hanover College, Hanover*, has been increased during the year by a number of gifts, the largest of which was from Rev. James A. McKee, D. D., of Thomasville, Ga. Dr. McKee has completed the endowment of the chair of "Ethics and Christian Evidences" by an additional gift of ten thousand dollars, making the professorship now twenty thousand dollars. This is the first professorship endowed by an alumnus of the college.

The *Indiana Academy of Science* is an association developed within a few past years from a small beginning to a membership of more than two hundred amateur and professional scientists. Almost every division of science is said to be well represented by a large number of investigators.

The officers for 1888-89 are: President, J. P. D. John, of De Pauw; vice-presidents, J. C. Branner, of Indiana University; S. C. Mendenhall, of Rose Polytechnic Institute, and O. P. Hay, of Butler University; secretary, Amos W. Butler, of Brookville.

On Friday, December 27, 1883, upon the adjournment of the *Indiana Academy of Science*, a body of fifteen students of natural sciences met and organized a "Western Society of Naturalists." Its purpose is to discuss methods of teaching and investigation in the line which that title indicates, and to provide measures of administration.

IOWA.

The statistics of nineteen institutions of Iowa are included in Table 49. Five of these are styled universities.

Thirteen of the entire number of universities and colleges report preparatory departments. Normal and business courses are not so prevalent as in the majority of the Western States.

The University of Iowa owes its endowment to the "Seminary Fund" derived from the sale of lands set apart for that purpose by the United States, and to annual appropriations from the State.

As yet Iowa has not followed the precedent of many Western States in providing a distinct tax for the university fund. This measure, which has proved beneficial wherever adopted, is urged upon the attention of the Legislature.

* Twenty-two per cent. of the reported income of the university is derived from tuition fees received in the various departments. In the college department the annual charge to each student is twenty-five dollars. It has been determined, however, by the board of regents that no student need be excluded from the university by reason of his inability to pay tuition. Applications for reduction of tuition, or for exemption therefrom, may be made to the president, and will be considered by the executive committee or by the board of regents.

As will be seen by reference to the detailed statistics, the university makes an excellent showing as regards library, scientific apparatus, and property valuation. It has also a large and able faculty. The admission requirements indicate the purpose of maintaining high standards in all the college courses.

Iowa College, Grinnell, has had a prosperous year with substantial increase of its permanent resources. The number of students is constantly increasing, especially in the collegiate department.

The faculty are meeting with success in their efforts to bring students into the regular courses. It is recognized that this is one of the most effective means of inspiring students to hold steadily on and graduate with their classes.

The commencement of 1887 witnessed the inauguration of the college's second president. The occasion was further notable for substantial gifts. Ex-Governor Samuel Merrill, of Des Moines, pledged twenty thousand dollars to endow a professorship yet to be designated by him.

Mr. Alonzo Steele, of Grinnell, gave twenty thousand dollars to endow the chair of mathematics and natural philosophy, to be called, in memory of his daughter, the "Myra Steele" professorship. The alumni are enthusiastically at work on a fund to endow the "Alumni Professorship," the department yet to be specified. They have already secured in cash and interest-bearing notes about four thousand dollars.

Hon. E. A. Goodnow, of Worcester, Mass., has added to his other gifts to the college the offer of five thousand dollars to be put in the hands of the trustees for a ladies' college whenever they are ready to go forward with the work. The college is to bear the name of "Mary Grinnell Mears," in honor of a graduate of the college who was the wife of Mr. Goodman's pastor. It is planned to put up this building in the summer of 1888.

Other gifts to the amount of \$3,750 are reported.

Griswold College, Davenport, under the auspices of the Protestant Episcopal Church, comprises the following departments: Wolfe Hall, Collegiate; Lee Hall, Theological; Kemper Hall, Diocesan School for Boys, and St. Katharine's Hall, Diocesan School for Girls.

Wolfe Hall offers three courses of instruction,—a four-year classical course; a three-year scientific; and a one-year commercial course. The appointments of the college are excellent; it has at all times maintained high standards, and its graduates are found in places of trust and honor.

The eighth annual session of *Drake University, Des Moines*, opened in the autumn of 1888 with a very large attendance.

The *Callinan College* has been placed under the management of the university board, and normal, musical, art, law, medical, and business schools are in operation.

The report of *Franklin College, Franklin*, shows progress in many particulars. During the year a chair of modern languages has been added, and the chair of sciences divided between botany, and geology, and chemistry, and physics.

A new building is in process of erection, which will greatly increase the facilities of the college.

Report of Committee on Uniform Admission Requirements.—A conference of superintendents and high school principals of Iowa with the faculty of the State University of Iowa, to determine uniform requirements for the admission of high school graduates to the university, reported the following course; the numbers indicating the number of terms, and the studies printed in italics; the elective courses to be taken in order to admission to the classical course:

First year: *Civil government*, 2; *algebra*, 1; *history*, 2; *composition*, 1; *Latin* 3; *English grammar*, 3.

Second year: *Algebra*, 2; *geometry*, 1; *rhetoric*, 2; *botany*, 1; *Latin*, 3; *natural philosophy*, 2; *physical geography or zoölogy*, 1.

Third year: *Geometry*, 3; *English literature*, 3; *Latin*, 3; *commercial arithmetic*, 2; *chemistry or astronomy*, 1.

KANSAS.

The University of Kansas, Lawrence, shows steady progress year by year in all the conditions of a vigorous work. The standards of admission have been raised within the last three years, and the normal department and the lower classes of the preparatory department have been dropped.

The immediate effect of these changes was a slight reduction in the aggregate of students. The enrolment for the present year, however, has reached a larger number than that for 1884-85. The students entering have better preparation and greater maturity of mind than formerly; as a consequence they are more interested in advanced work and show larger results for the instruction, whereby the university is greatly advanced in the esteem and confidence of the people.

Since 1885 the following have been added to the university buildings: The Snow Hall of natural history, for which the Legislature appropriated fifty thousand dollars at its session of 1885. A stone building to contain the steam-heating plant and the engine and other heavy appliances of the electrical engineering department; appropriation for the same, sixteen thousand dollars.

Large additions have also been made to the cabinet collections, laboratory equipments, and other apparatus.

The rapidly increasing demand for well-trained electrical engineers has led the university to provide a course of theory and practice in both light and heavy electrical engineering. It comprises, in addition to applied electricity, full courses in general physics and chemistry, such training in mathematics as is necessary to the proper understanding of the theories of electricity and magnetism; in French and German as will enable the student to read scientific works in those languages, and in mechanical drawing as is required for making drawings of machinery. Such studies in civil engineering as are deemed essential to the electrical engineer are also included in the course.

Excellent facilities for practical work in general physics, chemistry, and light electrical engineering are provided in the very completely equipped laboratories of the university.

The people of Lawrence are working toward the construction of a building for the accommodation of lady students at the university. A committee of citizens has been appointed to solicit subscriptions for this purpose, and there appears to be a fair prospect of twenty thousand dollars being raised at an early day for the object stated.

Ottawa University reports that a site for a new building has been chosen and preparation made for laying the foundation during the current year.

Washburn College, Topeka, has made material additions to its equipment for science instruction during the year. It offers courses leading to the degree of bachelor of arts and bachelor of science.

The corner-stone of the main building of *Garfield University, Wichita*, was laid in November, 1887, under a charter dated April 6, 1886. The building covers more than an acre and a half of ground; will cost when completed two hundred thousand dollars, and is expected to be completed in September, 1888. The north wing, containing twenty-one rooms, was finished and furnished in 1887; several departments were opened in September of that year, and colleges of arts, music, business, and theology have been established with about twenty-five teachers and more than three hundred students; also a normal college at Enterprise.

KENTUCKY.

Table 49 contains the statistics of thirteen colleges of Kentucky. All of these have preparatory departments: four report normal and commercial departments, and two the latter only. Several of the colleges have suffered diminution of patronage and other embarrassments during the year from the failure of the crops in the sections upon which they depend for support.

Ogden College, Bowling Green, makes provision for a two years' preparatory course and three college courses of four years each.

President Obenchain, A. M., in his return to the Office calls attention to the fact that "the free basis on which this college has been organized necessarily limits the number of students, as the funds for salaries and other expenses are derived almost entirely from the productive fund." By working six hours a day in the class-room, he says, "our present faculty can instruct about one hundred pupils, provided the classes are suitably divided. In 1886-87 we had during the year one hundred and fourteen students, which for a time taxed our capacity. Last year, 1887-88, the number was seventy-eight. The falling off was mostly from the country, and was doubtless mainly due to the disastrous drought we had in this section last summer. Our courses are well arranged, and our work is thorough as far as it goes. Appointments from this Congressional district to West Point and Annapolis have for some years been taken from the boys who have passed

through our preparatory department, and all of our graduates who have afterwards gone to higher colleges or universities have invariably taken a high stand and acquitted themselves with honor."

Georgetown College, Georgetown, reports a new gymnasium due to gifts from liberal friends.

LOUISIANA.

The Louisiana State University and Agricultural and Mechanical College, Baton Rouge, was formed by the consolidation of the two institutions whose names are retained in its designation.

The history of the State University dates back to 1806, when the first grant of land was made by the United States Government for a seminary of learning in the State. The institution was formally opened January 2, 1860.

The Agricultural and Mechanical College was established by legislative action in 1873, to carry out the provisions of United States land-grant act of 1862.

The first joint session of the two institutions was opened October 5, 1877.

By act of Congress approved July 12, 1886, the United States barracks at Baton Rouge were turned over to the university, which has thus secured excellent housing and ample grounds.

The duty of making adequate appropriations for beautifying the grounds and fitting and furnishing the building for scholastic purposes is urged upon the General Assembly of the State by the board of university supervisors.

The institution comprises a sub-freshman department, having a two years' course, a course in agriculture, and a course in mechanics and civil engineering, each leading to the degree of B. S., and a literary course leading to the degree of B. A.

The above-mentioned courses are all of four years' duration. There is also a commercial course of two years.

Tulane University, New Orleans, has just completed its fourth year. During this brief period it has achieved an enviable reputation and has contributed materially to the solution of some of the more important problems of modern education.

The university ideal carried out in its organization is that of an institution for the pursuit of all knowledge and the training of all the faculties. It comprises a high school, a college of liberal arts, the Sophie Newcomb Memorial College, opened October, 1887, a law and a medical school. The two last-named are schools of long standing and wide repute.

In the conduct of studies the line "between university work and collegiate or academic work is sharply drawn. The former is elective and of the most advanced character; the latter is embraced in a series of equivalent curricula, extending through seven years, three in the high school and four in the college, all leading to the degree of bachelor of arts, with or without distinction, according to attainment."

A manual training school has been established, with reference to which the current catalogue says: "It is considered as the workshop or laboratory of the high school for technical training; but other students of Tulane College are admitted to it on easy conditions. It is not intended to teach trades to young men, but to make them experts in the principles and handicraft of wood-working, iron-working, and machine construction. The appliances are as nearly perfect and the scheme of instruction as thorough as in any institution in the United States. The effort will be made to dignify and elevate labor without interfering with more abstract pursuits."

The university also maintains a free drawing school, with day and evening classes.

In answer to certain objections to this work as alien to the legitimate province of a university, the conception of the trust imposed by Mr. Tulane and the results of the experiment are submitted in the following statement:

"The duty imposed upon his administrators by Mr. Tulane was the higher education of the white youth of Louisiana, and they were constrained, in view of the depressed condition of education here, to take the broadest view of their responsibility. Recognizing that the prime function of the university is the higher education of its students, and that it also owes to science and the world encouragement and aid in the prosecution of original research, investigation, and discovery in some of the many branches of human knowledge, they felt that, to complete the round of its duty to humanity, the university had still the further duty to assist in elevating the general level of tone and culture in the community and State by every means in its power. The two former objects were effected directly, and the third indirectly, by the appointment of an able and energetic faculty. But an intelligent and appreciative public is an atmosphere essential to the growth and prosperity of the university itself, and, with the many discouragements to education here, it behooved its guardians to take energetic steps for the enlightenment and improvement of all who aspired to a better intellectual condition. Their good faith

in carrying out this view is evinced in our free museum, our free libraries, our free public lectures, and our hospitality to every association engaged in legitimate literary or scientific work. But their largest, most direct, and most fruitful scheme of public beneficence has been the free drawing school.

"Drawing as an art is the foundation of so many branches of industry and as a training calls into play so many faculties of man, that the education of a community in it would be a priceless gift. In no other way could Tulane University do so much for the general public as by extending to all who sought this means to further self-development gratuitous instruction in drawing. Classes were opened and hundreds eagerly availed themselves of the privilege. More than twenty-five hundred pupils have received free tuition, numbered by separate years, and more than fifteen hundred, allowing for the double counting of those who have followed the course more than one year. So far no one has been denied admission to these classes who came within the category of bread-winners, and indeed the only restriction placed upon entrance has been immaturity in age or incompatible duties."

MAINE.

The reports received from the three well-known colleges of Maine show a continuance of all the conditions of excellence that have characterized their work for many years.

The record for 1887-88 offers few particulars beyond those included in the tabulation.

President Pepper, of Colby University, reports that "the curriculum has been somewhat changed, owing to two distinct causes; the first, the introduction of a new professor into the faculty; the second, the observed failure of the single elective plan to meet the expectation of the faculty or the wants of the students. As the extent of our elective studies is comparatively limited, and must necessarily remain so, it is judged safe to rely upon the preponderance of required studies to secure steadiness and unity. The electives, as heretofore, fall wholly within the Junior and Senior years, and, with some notable additions, remain as they were, but each student is allowed to choose from term to term from the courses offered. This is giving satisfaction to all."

With reference to the experiment of introducing Hebrew as a Senior elective the president says: "I call special attention to this, as the board of trustees of Newton Theological Institution last year requested this board and the board of Brown University to introduce Hebrew as an elective. It seems to me not likely that much advantage to our theological seminaries will be realized, unless the principal colleges unite in the introduction of the Hebrew into their respective curricula. I would suggest that the matter be left with the faculty for the present. They are sure to consider it carefully and to act wisely."

Professor Adams, director of the gymnasium, reports that "the past college year has witnessed the first serious attempt at Colby to provide for the students opportunities for that regular and systematic exercise which all physiologists recognize as a prime necessity in the maintenance of perfect health."

"The claim which the young ladies of the college have to a share in the opportunities for physical training afforded by the college was substantially recognized at the beginning of the fall term by the establishment for them of a class for regular exercise. This class has been continued through the greater part of the year, four half hours a week being given to it during the fall and winter terms, and three half hours during the summer term. Though a complete innovation it has seemed to meet with as much success as could fairly be expected. The hinderances to a full realization of the benefits of the gymnasium work have been greater with them than in the case of the young men.

"The only hour suitable for the class was that just before a recitation, and this fact undoubtedly contributed to lessen the attendance. Various reasons prohibited the use of the gymnasium costume, which is an important feature in all gymnasium work. About fifty per cent. of the lady students have taken the exercise regularly, and the enthusiasm for the work that has been evinced leads me to believe that were better facilities afforded very general attendance would result.

"Other means of obtaining a proper amount of exercise being largely wanting to them, the gymnasium becomes of double value, and I should expect the gymnasium exercise to exert a very marked and satisfactory influence on their general health. The experiment of conducting their classes in the gymnasium used by the men at other times has shown that it can be done with advantage."

MARYLAND.

In his report for 1887-88 Dr. D. C. Gilman, president of *Johns Hopkins University, Baltimore*, gives the following summary of the years: "In this review of the activity of the university during the year 1887-88 steady advances may be perceived. The number of students has increased; the standard of scholarship has been maintained; the publications have been as many as ever; the fidelity and enthusiasm of the princi-

pal teachers can not be too strongly commended. Our only cause for anxiety is the loss of income from the stocks which were given to the university by its founder."

He also calls attention to the following particulars relative to the number and classification of students during the twelve years since the opening of the university: "During twelve years twelve hundred and sixty-nine individuals have been enrolled as students, of whom five hundred and seventy have come from Maryland (including four hundred and forty-eight from Baltimore) and six hundred and ninety-nine from fifty other States and countries. Of this number seven hundred and thirty-three persons pursued courses as graduate students and five hundred and thirty-six as collegiate students.

"Since degrees were first conferred in 1878 one hundred and seventy-seven persons have attained the baccalaureate degree, and one hundred and thirty-one have been advanced to the degree of doctor of philosophy."

The following extracts from his report relate to subjects of widest interest as regards the highest order of scholastic work:

Work of Investigation and Publication of Results.—"In the encouragement of advanced studies and the publication of results this foundation has aimed to do its part. By precept and example hundreds of young men have been trained in the methods of exact science and the habits of accurate investigators. Not a few of these students have been called into the scientific service of the Government; many are engaged in laboratories, scientific and technical; more are employed as teachers in training up other young men. We can point to no result of our efforts which is so gratifying, and which so thoroughly repays the outlays of this foundation, as the corps of graduates who have gone out from among us to every part of the country, prepared to contribute to the progress of knowledge, and who are now rendering good service to science, literature and education. By encouraging the publication of journals and monographs this foundation has endeavored to supply another of the deficiencies referred to above. Five periodicals, devoted to mathematics, chemistry, biology, philology, and history, have been aided by the university chest, and three others, devoted to archaeology, psychology, and modern languages, have been initiated on the personal responsibility of certain members of our academic staff."

Provision for the study of astronomy.—"An observatory for instruction is now provided. Beside the telescope mentioned in the last report, the university has purchased a meridian circle (made by Messrs. Fauth & Co., of Washington), with collimators, mercury basin, and other appliances. * * * To receive this instrument a special structure has been built adjacent to the physical laboratory. A class in practical and theoretical astronomy has been organized under the guidance of Prof. Simon Newcomb, for many years connected with the Naval Observatory in Washington, and now Superintendent of the U. S. Nautical Almanac. During the coming year he will be assisted by Mr. Charles A. Borst, lately one of the astronomical observers of Hamilton College, who has received among us the appointment of a Fellow."

"From these statements it is apparent that we are now provided with the most important of the astronomical apparatus suggested many years ago by Professor Newcomb in one of his public lectures as desirable for the practical instruction of astronomers. We have also the qualified teachers, and a company of students has begun the prescribed course. The further development of this department of study will be watched with great interest. Its distinctive character is its adaptation to the needs of young men already proficient in mathematics who need to be trained in the methods of astronomical inquiry, and who want easy and constant access to suitable instruments, as they have in the laboratories of chemistry and physics.

"One leading idea of the work is to associate with the technical study of the subject a greater breadth of culture than can readily be gained by the student whose attention is wholly occupied by practical work in the observatory or the field. It is therefore intended that all students taking the doctor's degree in astronomy as their principal subject shall have an understanding of the historic development of the science since its beginning, of the additions made to it by its leading cultivators, of the mathematical theories of the celestial motions, and of the practical use of the most important astronomical instruments."

The Laboratories.—The new physical laboratory, whose completion was noted in the Commissioner's Report for 1886-87, gives greatly increased facilities for instruction and also greater scope and efficiency to the investigations carried on. "Arrangements have been matured for beginning, in the autumn of 1888, the testing of electrical instruments and standards for other laboratories, scientific and industrial. This work, under the supervision of the chief instructors, will be intrusted to Dr. Liebig, a recent graduate in physics, who has shown himself well qualified for the responsibility. Correspondence between Dr. Duncan, associate in electricity, on one part, and the leading electric manufacturers and the professors of physics in different parts of the country on the other, has indicated the need of such a bureau as is now established. Its actual utility will

soon be demonstrated." Work in the chemical laboratory has been prosecuted with increased enthusiasm. During the past year every available place in the laboratory has been occupied, and the director is obliged to call attention to the necessity for an increase of accommodations if this state of things continues.

"Since the foundation of this university the biological sciences have received special encouragement, partly because of the rapid advances that they have been making and partly because of their relation to the progress of modern medicine. Prolonged courses of training are arranged for those who propose to devote their lives to investigation or to teaching in these branches, as well as for those who intend at a later period to study for the profession of physicians and surgeons. As in physics and chemistry, abundant facilities for laboratory work are called for; instruments, materials, and assistants have been and must be liberally provided."

"The unusual opportunities which have here been provided for students to become acquainted with the most recent methods of pathological investigation are but little known, partly because of their novelty and partly because pathology has been usually regarded as a branch of a distinctly professional education. Looking forward to the time when a medical school will be organized—in close relations to the Johns Hopkins Hospital on the one hand and to the philosophical faculty of the university on the other—the trustees in 1883 determined to supplement the physiological work already directed by Dr. Martin with a new department of pathology, in which the most recent and approved methods of research should be introduced. * * * All the apparatus required for such investigations has been provided by the trustees. Cultures of a large number of pathogenic micro-organisms have been collected, and likewise a great deal of material illustrative of human and comparative pathology. The laboratory is open and teachers are present during the entire day."

The president expresses regret for the unexpected interruption in the department of psycho-physics consequent upon the acceptance by Prof. Stanley G. Hall of the presidency of Clark University.

The report presents full and interesting information relative to the courses of instruction in language and literature. The progress which Assyrian studies have made in the universities and theological schools within the past few years gives peculiar interest to the part of President Gilman's report relating to the work of Dr. Haupt, one of the leaders of this movement.

In addition to his work as instructor and investigator, Dr. Haupt "has begun the publication of a journal entitled *Contributions to Assyriology and Semitic Comparative Philology*. * * * He has also in press the second part of his *Babylonian Nimrod* epic, containing the cuneiform text of the eleventh and twelfth tablets, as well as some new fragments of the poem found since 1882. The cuneiform account of the Flood (first brought to light by George Smith in 1872) will be considerably advanced and corrected by this new edition. The fragments were all copied by Dr. Haupt from the originals in the British Museum, in 1882, and recollated during the past summer.

"Arrangements have also been made for publishing the now scattered writings of Dr. Edward Hincks, of Dublin, the early and successful interpreter of cuneiform inscriptions.

"An announcement still more important has been made to the American Oriental Society by Professor Haupt. With the co-operation of some of his advanced students, he has begun the preparation of an Assyrian glossary. The work is going on at the present time, but of course the period requisite for its completion is not certain. * * * Baltimore affords special advantages for the pursuit of the studies owing to its proximity to Washington. The U. S. National Museum is making an effort to develop its Oriental section, and before the end of the year there will be placed on exhibition a study collection of Assyrian and Egyptian monuments which will furnish an excellent opportunity to students desiring to draw directly from the original sources. It may be stated in this connection that Professor Haupt and Dr. Adler were appointed in February last honorary curator and honorary assistant curator of the Oriental antiquities in the U. S. National Museum."

St. John's College, Annapolis, is an outgrowth of King William's School, founded in 1696 by an act of the General Assembly, and opened for instruction in 1701. In 1784 the school was merged into the newly chartered St. John's College, which began practical operations in 1789. The college has therefore completed a century of work, while through the original school its history is traced back to the colonial period. Among the distinguished alumni of the college appear the names of William Pinkney and Francis Scott Key, the author of our national ode, "The Star Spangled Banner."

The college comprises a preparatory department, having a three years' course. The collegiate courses are four in number, each of four years' duration. They lead to the degrees of B. A., B. S., B. L., and M. E.

In his return to this Office for the current year, President Fell says: "This college is

entirely unendowed, and depends for its income upon appropriations by the State and the tuition fees. * * * In spite of this and in spite of the withdrawal of the appropriation by the State in former years, the college prospers. The number of students steadily increases; the work done by them is highly satisfactory, and is recognized by the Johns Hopkins University as on a par with the work done by the students of that institution."

MASSACHUSETTS.

In his report for 1887-88, Dr. Charles W. Eliot, president of *Harvard University*, states that "in 1883 for the first time the examinations for admission to the college were conducted exclusively on the new plan announced in 1886."

The subjects presented by the candidates show that the secondary schools, and the private tutors who prepare boys for college, "have already responded in fair measure to the new suggestions, offers, and requirements of the faculty," and that the "new requirements have already stimulated the teaching of French and German in secondary schools, and have promoted the introduction of laboratory methods of studying physics and chemistry."

Dr. Eliot observes further that "under the former scheme of admission examinations, the commonest method of entering was by presenting all the required elementary subjects, but not both French and German, and among the advanced subjects Latin and Greek with composition. On the average of the years 1883 to 1886, inclusive, this set of subjects was offered by two hundred and twenty-one candidates out of three hundred and fifteen, but in 1888 by only one hundred and forty-four candidates out of three hundred and fifteen; yet this was still by far the commonest combination of subjects, the next group of candidates who offered a common set of subjects numbering but thirty-one. In all, seventy-six different combinations of subjects were presented; but this diversity caused not the slightest embarrassment in the conduct of the examination. This liberty of choice among the subjects of examination has the effect to increase very sensibly the number of candidates who offer more subjects than are required. One-quarter of all the candidates in 1888 offered more subjects than were necessary. This fact shows two things: (1) that some schools already give instruction in more than the minimum number of subjects; and (2) that many boys can do more work before coming to college than the admission examination calls for."

"In the gradual process of converting Harvard College into a university of liberal arts and sciences" the president reports "that the average gain was made in 1887-88."

"In respect to the volume of instruction, the gain of 1887-88 was about five per cent., that is, from four hundred and eighty-five hours a week to five hundred and ten hours, without counting repetitions, and this gain coincides with the average annual increase of the last five, or of the last ten years.

"In respect to freedom in choice of studies, the Freshmen gained access to the departments of Italian, Spanish, and music, from which they had previously been excluded."

"In respect to co-ordination of courses, an important improvement was made by recasting the whole set of courses in physics, so as to secure a better sequence of subjects and a more complete covering of the ground; the opportunity for special advanced study and research was offered for the first time in German, and more explicitly than before in romance philology; and the corresponding opportunities in history, physics, and chemistry were enlarged.

"Lastly, the *morale* of the college was favorably affected by several causes. In the first place, the assured success of the voluntary method in the religious services of the university, concerning which some anxiety was felt during the first year of trial (1886-87), was a solid satisfaction to every member of the university, whether teacher or student."

"Secondly, a considerable number of instructors used effectively during 1887-88 the new regulations of 1886, which provide that every student shall satisfy his instructor in each of his courses of study that he is performing the work of the course in a systematic manner, and that any instructor may, with the approval of the dean, exclude from his course at any time a student who is neglecting the work of the course. These regulations emphasize the fact that membership in any instructor's class is a privilege granted by the college—a privilege to be kept only by regular attendance and systematic work to the satisfaction of the instructor."

"This direct personal relation between the instructors and students, free from the intervention of any officials charged in a formal way with the maintenance of college discipline in general, is in the highest degree wholesome and satisfactory. The regulations of 1886, together with the careful maintenance and watchful use of the record of each student's attendance, which is kept in the dean's office, promise to solve all the remaining difficulties of the transition from the former mechanical system of enforced attendance, with all its pernicious apparatus of excuses, certificates, and graduated penalties, to a system of rational liberty with direct personal responsibility for

results. In all its discipline, the college faculty tends to abandon the principles of government implied in the words, offences and punishments, and to act, even in cases of gross neglect or vice, on the principle contained in the last clause of the statute concerning students not candidates for a degree: The several faculties have the right to deprive any such student of his privileges, if he abuse or fail to use them. A third cause of improved relations between faculty and students was the exhaustive report on athletics which was presented to the college faculty in June last by Profs. J. W. White, Chaplin, and Hart, an outcome of a discussion which took place in the board of overseers during the spring. This report, with the accompanying statistics, disposed of some of the objections to athletic sports and intercollegiate contests, demonstrated their general utility, and set in a clear light the improvement of the average physique of the students which the gymnasium and the various sports had together brought about. Although the report contained many criticisms upon the present managements of athletic sports, its general effect was highly encouraging both to the faculty and to the undergraduates as to the moral and physical effects of athletics at Cambridge taken as a whole. It immediately brought about a better understanding between the faculty on a subject of great interest, concerning which there had been much divergence of opinion. Some of the recommendations of the report have been already adopted, and others are likely to be. There are still many excesses and evils connected with athletic sports as intensified by intercollegiate competition; but the faculty take comfort in the general physical improvement which they witness in the average student; and they hold that dyspepsia is less tolerable than a stiffened knee or thumb, and that effeminacy and luxury are even worse evils than brutality."

"The college, including the graduate department, is now paying out more than fifty thousand dollars a year to students who need aid to compass their education."

"In 1887-88 the faculty instructed the dean to inform holders of scholarships that they are expected to present themselves twice a year before the director of the gymnasium to be examined as to their physical condition, and receive suggestions as to the care of their health."

The graduate department had a larger attendance than in any previous year. "Nevertheless," says the president, "the resort to this department from other colleges is still small in proportion to the volume of advanced instruction offered and to the unequalled facilities for research in all directions which the university libraries, laboratories, and collections afford. The secretary of the academic council again urges that more scholarships are needed for graduate students. The eager demand for the six Morgan Fellowships and the excellent quality of the incumbents from year to year are strong arguments in favor of more such endowments."

The professional schools of the university have been unusually prosperous during the year. "The Divinity School is the only professional school of the university which receives no students as candidates for its degree who are not already bachelors of arts. Considering the small number of students in the school, it is recruited from a remarkable number and variety of colleges. Thus, in 1887-88, seventeen students came from three theological seminaries and twelve colleges, and in 1888-89 twenty-six students came from three seminaries and fourteen colleges."

"Since the statement was made in the report for 1877-78 concerning the unsectarian policy of the school and its pecuniary needs, its endowment, apart from its share in the income of the Bussey Trust, has been more than doubled, a new building has been provided for it, its library has been much increased, and, best of all, important additions have been made to the permanent teaching staff."

"The Law School had a year of great prosperity in 1887-88. The number of students increased 20 per cent., the Story Professorship was filled again, after having been vacant four years, and the Harvard Law School Association gave the school one thousand dollars with which to increase the amount of instruction in constitutional law during the year 1888-89."

"The year saw some important changes wrought in the Medical School. The whole course of study was revised, two hours a week of elective studies were introduced into the third year, and all the studies of the fourth year were made elective."

The medical faculty was increased in size from twenty-one to twenty-six members. One assistant professor resigned, one was newly elected, and one was promoted to be professor. Three professors and one instructor without limit of time were chosen, and the demonstrator of anatomy was appointed a member of the faculty for five years. The number of annual appointments given in the catalogue was also increased from thirty-eight to forty-five. At present, therefore, no fewer than seventy-one members of the medical profession in Boston and the vicinity are officially connected with the school of medicine."

"The Dental School was never more prosperous than in 1887-88. The admission examination instituted in 1885 at first caused the number of students admitted to de-

cline; this diminution proved to be only temporary, but the good effects of the examination abide. In 1887-88 the school had three dental professors, three instructors in dental subjects appointed for more than one year, five instructors in operative dentistry who superintended the work of students in the infirmary, and two demonstrators."

Among the gifts received by the university during the year the following are specially noted by the president:

"In November, 1887, the corporation were informed by the trustees under the will of Walter Hastings that they were ready to erect at Cambridge, according to the terms of the will, upon land to be given to the university, a college hall for students' chambers, to cost not less than two hundred thousand dollars and not more than two hundred and fifty thousand dollars.

"By the will of the late Ellen Gurney, widow of Ephraim Whitman Gurney, the university received a bequest of seventy-five thousand dollars and the residue of her estate, with directions 'to apply the net income for the support in Harvard College of higher instruction in history, political science, and literature (these subjects being taken in a comprehensive sense) in such manner as may from time to time seem most expedient to the president and fellows.' The amount realized by the university from this bequest is \$169,925.38.

"The university received during the year two wholly unrestricted gifts; the first a bequest of twenty-two thousand dollars from John Cowdin, of Boston, and the second a bequest of thirty thousand dollars from William Perkins, of Boston." (Mr. Perkins's gift was in memory of his three sons, all graduated at Harvard College.) "The oldest son (A. B. 1857) was killed at Fort Wagner, S. C.; the second (A. B. 1860), who served three years during the Civil War and was wounded at Chancellorsville, died at Boston in 1879, and the third (A. B. 1864) died in 1873.

"Mr. Henry Reginald Astor Carey, of New York, who was a special student in the college in 1886-87, gave the president and fellows twenty-five thousand dollars on November 14, 1887, 'to be used in building five courts for the use of the university, especially for the base-ball nine, either as attached to the gymnasium or as a separate building, as the corporation may decide.' The construction of the building has been delayed by difficulties in deciding on the best mode of carrying out Mr. Carey's generous intentions.

"Members of the class of 1856 gave to the president and fellows six thousand dollars as a permanent fund, the income of which 'is to be used for the publication from time to time, in a serial form, of contributions to classical learning by members of the university or graduates of the same, and such other contributions to classical learning as may be deemed advantageous to the university to publish.' This is the second publication fund which the university has received, the first being the John Elliot Thayer fund of fifteen thousand dollars for publication in the department of political economy."

The spirit of *Amherst College, Amherst*, is eminently progressive, and at the same time judiciously conservative. It was a leader in the movement for systematic physical culture controlled by competent directors. As early as 1831 Dr. Hitchcock issued a report of twenty years' experience in this department, which has given a great impulse to the work in other colleges.

In 1880 Amherst College tried the experiment of abolishing the old marking system. An assignment of rank in the award of diplomas was continued, but the old scale, with its first, second, and third classes, disappeared.

A new system of government was also introduced. Expulsion, suspension, and similar disciplinary expedients were abandoned. The matriculate became a party to a contract. He signed the college laws and engaged to keep them. In the case of his failing to keep his contract his connection with the college virtually ended. This experiment has been carefully watched, and its success has had the effect of modifying the modes of discipline in other colleges.

The following particulars concerning the present organization and conduct of Amherst are derived from the catalogue for 1887-88:

"The course of undergraduate study extends through four academic years. It embraces philosophy, history and art, language and literature, and science. Each study is pursued comprehensively, and at the same time with the minuteness requisite for the broadest and most accurate training. It is the aim of the college not so much to make specialists in any given department as to prepare the student for the best special work in his subsequent life.

"For the first year and the first term of the second year the same studies are pursued by all the students. At the beginning of the second term of the Sophomore year certain studies become elective, and these are afterward increased in number, so that during the Junior and Senior years the student, under such regulations as the faculty find it wise to prescribe, can choose such studies as are best adapted to his own needs from

nearly all the departments taught in the college. Excellent results have appeared from this method. The special wants of the student are thus met, his zest and progress in his work are increased, and his association with his teachers becomes thus more close and intimate.

* * * "The college adheres to its old requirement of Greek as a condition of entrance, and as one of the principal studies of the Freshman and Sophomore years. It insists on the mastery of this language as an invaluable discipline of the mind and an indispensable foundation for a scholarly knowledge of the languages and literatures, not only of the ancient, but of the modern European world.

"During both the Freshman year and the first term of the Sophomore year Greek is taken by every student excepting those pursuing the scientific or a special course, while it is open as an elective study during the most of the Junior and Senior years. * * *

"The work in the department of biology is all elective. It begins with the first term of the Junior year, and may be continued for the remainder of the collegiate course.

* * * "While one special aim of the department is to furnish the student of medicine with a broad foundation for his future studies, its general aim is to lead every student to a careful examination of the laws which govern the structure, actions, and occurrence of all living forms."

The departments of collegiate instruction are grouped in six general sections:

1. The Section of Philosophy.
2. The Section of Ancient Languages.
3. The Section of English.
4. The Section of Modern Languages.
5. The Section of Mathematics.
6. The Section of Natural Science.

In each of these sections the grade of the scholarship of each student is recorded on the scale of units from 1 to 5. Every student who has completed his work in each section may be admitted to the degree of bachelor of arts, or bachelor of science, and receive a diploma in testimony of the same. If his average scholarship be represented by the number 2, his diploma is given *rite*; if by 3, *cum laude*; if by 4, *magna cum laude*; and if by 5, *summa cum laude*. No student is entitled to a diploma whose work in any section is incomplete. Such student may, however, receive a certificate of his actual attainments in such partial course.

The department of hygiene and physical education is under the charge of two physicians, who keep accurately acquainted with the health of all the students. Each student, soon after he enters the college, and twice thereafter during his collegiate course, is minutely examined in reference to his strength and physical condition, and advised as to the particular course he should take for the maintenance and increase of his health and strength. A manual of average measurements, together with a record of his own measurements, is given him, and he is also directed to the most advantageous use of the ample appliances with which the Pratt Gymnasium is provided.

Beside the exercise which every student may take by himself the members of each class regularly exercise together in the gymnasium every week-day, excepting Wednesday and Saturday. Unless excused for physical disability, the attendance of every student is required at the gymnasium for the performance of the exercises in light gymnastics.

The results of the system of prescribed gymnastic training pursued in the college have been eminently satisfactory. While physiologists affirm that, as a general rule, the health of a young man from fifteen to twenty-five years of age is apt to decline, the reverse rule is found to prevail with students here. From statistics systematically kept for more than twenty years, it appears that the health of an Amherst College student is likely to grow better each year of his collegiate course. The average health of the Sophomore class is better than that of the Freshman, and of the Junior better than that of the Sophomore, and of the Senior class best of all.

Dr. Hitchcock has lately issued an Anthropometric Manual, a copy of which he gives to each student of the college, who is enabled thereby to compare his physical development with that of the average Amherst student for the last twenty-five years, and to determine the kind of exercise most favorable to his health and strength. In a statement dated November, 1887, President Seelye gives the following summary of the general progress of the college:

"Our numbers vary from year to year, but with a general tendency to increase, and with a general enlargement also of the area from which they are drawn. It is an interesting fact that about one-seventh of our annual admissions for the last few years have come from other colleges, and that these, as a rule, by the high stand they have taken here, have shown themselves students seeking for the best. Our average annual attendance for the last twelve years has been three hundred and thirty-nine,

while for the twelve years next preceding this period it was two hundred and sixty-seven. We only exceeded in numbers among the New England colleges by Harvard and Yale.

"I do not think that this is necessarily a sign of progress, or certainly a matter for congratulation. Numbers are very easily gained by any college which sets out to secure them. Where the standard of admission and instruction is kept high and no efforts are made directly to induce students to come, increasing numbers undoubtedly indicate an increasing growth of the college in the public estimate; and this is certainly to be prized. But if the classes should grow too large to permit each teacher to establish living relations by close contact with each of his pupils, this would be an evil altogether to be deplored; for education is wholly a personal work. It is not gained by books nor by instruction alone, nor by anything in place of living inspiration of the living teacher. Recognizing this fact, we have of late been enlarging our teaching force more rapidly even than our number of students has increased. Our faculty is larger by one-half now than it was twelve years ago.

"We are steadily enlarging our work in the line of political and social science, and desire the means to give it a still greater increase. The endowment by Mr. Henry Winkley, of Philadelphia, of the Winkley Professorship of History and Political Science was a great boon which has enabled the college to do more than ever before in this important department. The present year we shall add to our course in economic and social science a course also in international law, for which Dr. Tuttle has been making careful preparation in Germany and here. By the aid of friends of the college in New York, Dr. Frederic A. Bancroft has been engaged for the current year to give a special course, open as an elective to the Senior class, upon recent American history.

"The college is still keeping abreast of the times, mindful also, as it has ever been, of the principles which abide through all time. We are not beyond improvement, and are alive to any suggestions from any quarter respecting any progress; but we are not seeking for growth by severing ourselves from the living source in which the college through all its history has found its nourishment and strength. Those of you who are far from us, and not familiar with our present inner condition, will be cheered to know that the younger professors, who are to be our coming representatives, are as heartily imbued with the historic spirit of the college as the older ones. Our gratitude for the past is mingled, therefore, with joyous confidence in the future."

In his return to this Office, President Seelye writes as follows respecting the matter of discipline: "The most marked feature of the year has been the good order and decorum prevailing in the college. Under the system of college administration in vogue at Amherst, a body of students called the college senate, whose president is the president of the college, are associated with the faculty in the government of the college. Questions of college order and decorum, formerly adjudged by the faculty, are now referred to the senate, whose judgments, if approved by the president, are binding in the college. This experiment in college self-government is increasingly satisfactory. A higher self-respect and a more manly self-restraint have been among its most marked results."

The catalogue for 1887-88, of *Boston College, Boston*, calls attention to the fact that to the original classical course there was added September, 1873, at the special instance of the most reverend archbishop, a department in which the study of the ancient languages is superseded by exclusive application to English, the modern languages, and the sciences. This course is intended to offer the advantages of a thorough English education to that class of students who, not intending to follow the professions, stand in no special need of classical training; but for whom it is of importance that they be well grounded in their faith and spend a few years at least under healthy religious influence.

MICHIGAN.

The number of students at the *University of Michigan, Ann Arbor*, for the current year, according to the return made to this Office, was sixteen hundred and seventy-seven. Of this number a little less than one-half were residents of the State. Every State and Territory of the Union was represented in the attendance, three of the provinces of Canada, five European and two South American States, together with Japan and the Sandwich Islands.

President Angell, in his report for the current year, notes that the attendance exceeds that of 1883-86 by two hundred and seventy-six, and that of 1884-85 by three hundred and eighty-two. The largest gain for each of the last two years has been in the literary department, though there was an increase in every department except in that of medicine and surgery, where there was a loss of eight.

The equipment for science instruction has been materially increased by the new building for the physical and hygienic laboratories. With reference to the latter President Angell says, "it is, I think, the first established by any of our universities." The new

engineering laboratory is also nearly complete. These increased facilities for teaching science and its practical applications have been accompanied by a corresponding increase in the demand for such instruction.

Although there has been a relative and absolute increase of the number of students in the English, engineering, and scientific courses in the last few years, the classical course still attracts a much larger number than any other.

The full distribution of the undergraduate students is shown in the following comparative table:

	Percentage of Men.	Percentage of Women.
The A. B. course.....	30.7	32.3
The Ph. B. course.....	16.3	31.4
The B. S. course.....	13	9.3
The B. L. course.....	15	27
The Engineering courses.....	25	None.
	100	100

Prof. William H. Payne, A. M., whose distinguished service as professor of the science and art of teaching has attracted universal attention, has resigned to become chancellor of the University of Nashville, Tenn. His successor is B. H. Hinsdale, Ph. D., who comes into the work with the advantage of large experience and established reputation.

Albion College, Albion, reports an endowment of about \$315,000, of which \$115,000 are not yet available. It has, besides the college building, an observatory, and is in general well supplied with appliances for science instruction.

In his return to this Office for the current year President Scott, of *Hope College, Holland*, calls attention to the fact that the regular college course includes the studies which in many colleges constitute a distinct scientific course.

"We have decided," he says, "that the old-fashioned classical course, somewhat modified, is the best even for the scientifics, and this is the only one we publish" (A. B.).

Kalamazoo College, Kalamazoo, reports an increase of five thousand dollars in its annual income. This addition to its resources has been employed in enlarging the faculty and increasing the scientific apparatus.

The additions to the library during the past year have been numerous and valuable. The library of Prof. Edward Olney, containing nearly one thousand volumes, has become the property of the college. The shelves on which these volumes stood in Professor Olney's study at Ann Arbor have been transferred to the library room, and the collection thus retains its integrity, and is known as the Olney Library.

In addition to the large number of mathematical works in this collection, there are many volumes pertaining to the natural sciences, to history and general literature, and to the interpretation and illustration of the sacred Scriptures. There are also valuable encyclopædias, including the American reprint of the ninth edition of the *Encyclopædia Britannica*, and other books of reference not previously contained in the college library. The practical value of the collection is indicated by the fact that a large percentage of all books drawn by students during the year has been taken from the Olney shelves.

The new ladies' hall, erected by the Ladies' Hall Association, greatly increases the comfort of the young women who attend the college.

The facilities of *Olivet College, Olivet*, have been materially increased by a new and commodious building, erected at a cost of twenty-five thousand dollars. It bears the name of Roland Mather, of Hartford, Conn., who was its chief donor. It is devoted to scientific purposes. Besides two large recitation rooms, it contains the laboratories and lecture rooms for chemistry, botany, geology, biology, and zoölogy. It contains also the college museum and the Signal Service station.

MINNESOTA.

Dr. Cyrus Northrup, president of the *University of Minnesota, Minneapolis*, reports that the current year has been one of notable progress and development. Not only has the work of instruction been carried forward satisfactorily in all the departments which existed at the opening of this period, but the work in some of these departments has been enlarged, new departments have been organized, and the institution in its scope of instruction has been made in reality, what it has heretofore been in theory only, a university.

The whole number of persons graduated up to date has been three hundred and twenty-one. Of these, five have received degrees both in science and engineering, one in arts and in science, and six bachelors have received a master's degree after passing the required examinations. The graduates include eighty-five women, viz: bachelors of arts, thirteen; of science, twenty-one; of literature, fifty-one; of medicine, one; one of the number received a degree both in arts and in literature.

President Northrup calls attention to the gradual decrease in the preparatory department, while at the same time the number of Freshmen steadily increases from year to year. "The inference is inevitable," says President Northrup, "that the necessity for maintaining the preparatory department is constantly diminishing," and he expresses the belief that the time has come when the board of regents may safely determine upon a date for its discontinuance.

In respect to buildings, the president says: "The most pressing need of the university will be met whenever the new science hall and museum shall be finished. This building was begun in 1887. It is built of stone and has a front of 245 feet. It will furnish lecture rooms and laboratories for the work in geology, mineralogy, botany, zoölogy, and physiology. It will also furnish accommodations for the officers of the geological survey; and one wing, containing four thousand square feet on each floor, will be devoted to the museum. Provision is also made in this building for work in metallurgy and mining whenever the regents shall see fit to establish a school of mines. This building is now enclosed, but will hardly be ready for use the present year. Meanwhile the pressure for rooms large enough to accommodate our increasing classes is great, and shows conclusively that the erection of science hall was not begun a moment too soon. But even when this building shall have been finished there will remain the need of a larger chemical and physical laboratory, of a library building, of a medical college building, of a law college building, and of an observatory. The future prosperity of the university will be very much affected by the promptness or delay attending the erection of these buildings.

In *St. John's University, Collegeville*, "the curriculum pursued has been extended to meet modern demands. The courses of studies established are the ecclesiastical, the classical, medical, commercial, and scientific, besides a preparatory course for beginners."

The current catalogue of *Hamline University, Hamline*, presents an historical summary from which the following particulars are derived:

Hamline University, chartered April 3, 1854, is probably the oldest denominational institution in the State. The years of the greatest prosperity were from 1864 to 1869, when the annual enrolment reached three hundred.

In its most prosperous days, however, the institution did not have adequate financial support, and in the spring of 1869 the embarrassment became so great as to necessitate suspension. The board of trustees fully intended to reopen in two years, but a change of location having been decided upon, and unforeseen difficulties arising, eleven years passed by before they were able to carry out their intention. The new edifice was dedicated to Christian education July 20, 1880. On the 7th of February, 1883, this building was destroyed by fire. The work of rebuilding was begun at once, and on the 30th day of January, 1884, the new University Hall, a much more beautiful and commodious structure than its predecessor, was dedicated.

The Hall of Science, dedicated January 5, 1888, is a large building, well planned and equipped.

Macalaster College, Macalaster, reports a substantial library, to which valuable additions will soon be made.

The new observatory of the department of mathematics and astronomy connected with *Carleton College, Northfield*, was occupied during the year.

"The scientific department, always a prominent one in the college, is now more complete in its organization and appointment than ever before. Williams Hall, erected especially for its use, contains a large laboratory, with all necessary modern appliances for chemical experiments and analysis."

The sum of bequests received this year as reported on the return to this Office amounted to \$150,738. These donations were given by twenty-two persons, in amounts ranging from one to thirty thousand dollars.

MISSISSIPPI.

The University of Mississippi, Oxford, comprises two general departments, viz. a department of science, literature, and arts, and a department of professional education. The former includes three undergraduate courses of study leading respectively to the degrees of B. A., B. S., and B. Ph., and two post-graduate courses leading to the M. A. degree.

The only professional school established so far is that of law.

Since 1882 women have been admitted to the university upon the same conditions as men. The university is especially strong in the department of modern languages.

Clinton College, Clinton, reports temporary embarrassment from the prevalence of yellow fever in the vicinity. The fall term opened with only seventy-five students instead of one hundred and fifty, as had been anticipated; the number increased as the year advanced.

MISSOURI.

Central College, Fayette, has secured a telescope made by Alvin Clark & Son.

"Through the liberality of Col. Lon. V. Stephens, of Boonville, the college in 1886 acquired possession of a very desirable property, with a substantial brick building, conveniently situated and easily accessible from all parts of the grounds. This building, by a fund further provided by Colonel Stephens, was fitted up for the use of the scientific department of the college, and was occupied during the past year.

Substantial additions to the library have been made since the beginning of the present year.

Westminster College, Fulton.—The permanent endowment of this college has been increased by bequests to the amount of \$8,650.

On commencement day it was announced that citizens of Fulton and Callaway County had given ten thousand dollars for repairs and additional buildings. It is expected that the new building will be completed before the close of the year.

A chair of English biblical study is to be endowed.

A new gymnasium has been fitted up at some expense.

Washington University, St. Louis.—The current catalogue of Washington University gives a brief historical summary of the institution, from which the following particulars are derived:

Washington University, founded in the city of St. Louis, under an act of incorporation by the State of Missouri approved February 22, 1853, is intended to embrace the whole range of university studies, except theology, and to afford opportunity of complete preparation for every sphere of practical and scientific life.

By the eighth article of the Constitution "no instruction, either sectarian in religion or partisan in politics, shall be allowed in any department of the university, and no sectarian or partisan test shall be used in the election of professors, teachers, or other officers of the university for any purpose whatsoever. This article shall be understood as the fundamental condition on which all endowments of whatsoever kind are received." The Constitution also declares the articles now quoted "not subject to alteration at any time;" but to guard against all encroachments in this important particular, the directors have obtained from the General Assembly an amendment to the charter, by which said article is incorporated in the same, and thereby placed beyond the power of any future board of directors.

In March, 1871, the university received from the Hon. Hudson E. Bridge a gift of one hundred thousand dollars for the endowment of the chancellorship and for a library fund, fifteen thousand dollars toward the erection of a building for the polytechnic school, and fifteen thousand dollars for providing it with furniture and apparatus. In recognition of this liberality the board of directors voted that the office of chancellor should receive the title of "The Bridge Chancellorship."

The courses of study in the college are two in number, and lead, respectively, at the satisfactory completion of four years' work to the following degrees, viz: (1) bachelor of arts; (2) bachelor of philosophy.

The courses of study in the polytechnic school are four in number, viz:

- (1) A course in civil engineering.
- (2) A course in dynamic engineering.
- (3) A course in chemistry.
- (4) A course in mining and metallurgy.

The splendid equipment of the polytechnic school as regards instructors and material appliances and the standards and general conduct of studies have gained for it the highest distinction both in our own and in foreign countries.

Beside the college of arts and the polytechnic school the university includes the Henry Shaw School of Botany, established June 8, 1885, the St. Louis School of Fine Arts, and a law school dating from 1866.

St. Louis University, St. Louis.—The catalogue calls attention to the new building begun in May, 1886, and now nearly completed. It is a noble structure, and will prove an important factor in the development of the university.

NEBRASKA.

The report of the *Nebraska Central College of the Nebraska Wesleyan University, Central City*, gives the following account of recent changes in the work: "In 1886, by the action of the conferences of the Methodist Episcopal Church of Nebraska, a commission was

appointed for the purpose of unifying the educational work. As the result of earnest consideration, it was decided to unite the entire Methodism of the State on one central university, and make the existing colleges departments of the same. A friendly contest for the university was entered into by Omaha, Lincoln, York, Central City, and Bartley. It was decided in favor of Lincoln, which action was made unanimous.

"This plan meets the approval of the best men in the church, including a majority of the bishops.

"Thus Nebraska Central College takes its place as a part of a great system of education in this State, with a purpose to be second to none in the character of the work done.

"The board of university trustees have established the normal department of the Nebraska Wesleyan University in Nebraska Central College. The normal course will therefore be omitted in the university prospectus and made a specialty at Central City, making this department of Nebraska Central College the *State Normal School of the Methodist Episcopal Church in Nebraska*.

"The trustees have determined to secure donations to the amount of fifty thousand dollars for the purpose of paying off all debt, making needed improvements, and laying the foundation for a permanent endowment. Upward of thirteen thousand dollars of this amount have already been subscribed."

NEW HAMPSHIRE.

The report of *Dartmouth College, Hanover*, shows a continuance of all the conditions that have given it prestige in the past. During the year the trustees have had under consideration a proposition from a lumber company to lease to said company a large tract of land in the northern part of the State which belongs to the college, and for which the company has offered for the lumber only one hundred and fifty thousand dollars. This would make a noble addition to the collegiate endowment.

NEW JERSEY.

In February, 1888, the trustees of *Princeton College* accepted the resignation of President McCosh, and Dr. Francis Landey Patton, D. D., LL. D., was unanimously chosen as his successor. At the special request of the committee on the presidency Dr. McCosh consented to remain at the head of the college until the commencement in June, by which arrangement the Senior class were able to realize their desire of having his signature upon their diplomas. It was also provided that Dr. McCosh should remain at the head of the school of philosophy, which he has successfully organized, and should receive an honorarium of two thousand five hundred dollars a year in recognition of his valuable services.

In his address at the opening of the fall term for the present year Dr. McCosh stated that during his nineteen years' connection with the college the number of students had increased from two hundred and sixty-four to nearly six hundred, and the teaching force from sixteen or seventeen to forty professors and tutors. "The standard of admission," he said, "is more rigid, yet in advancing it we have been careful to exclude none who are worthy but have had few advantages." He expressed the opinion that "the best American colleges have almost reached the apex of their high standards of admission. Princeton in the future will strive not so much to raise the standard before entrance as to attain higher planes of knowledge after a student is fully initiated into the intricacies of a college course." "We have added," he continued, "new courses from time to time, as they have permanently proved their usefulness and established themselves in the minds of thinking people. New fields have been opened in science, literature, philosophy, and art, and to keep abreast of the times we have enlarged these departments to such an extent that in the variety of subjects offered and the thoroughness of the teaching we are excelled by the German universities alone. And they surpass us only by virtue of minuteness of detail and attention given to specialties."

Prior to his resignation Dr. McCosh submitted a report to the board of trustees advising that the name of the institution be changed to Princeton University. This change would be in the line of the developments which are rapidly taking place in the college.

A number of new fellowships were created in 1887, and the trustees have approved the plan for a new art school, and set aside a site for it and for a proposed biological laboratory.

Dr. Patton, who succeeds Dr. McCosh, occupied for several years the chair of "Relations of philosophy and science to the Christian religion," in Princeton Theological Seminary, and a few years ago accepted also the "chair of ethics" in the college.

Rutgers College, New Brunswick, comprises a classical department and a scientific school, which last is, by act of the Legislature, constituted the State College for the promotion of Agriculture and the Mechanic Arts.

In his return to this Office for the current year President Gates says: "Certain regular sources of income to the college can not be classed as 'productive funds,' because not owned in fact by the college, while yet they have all the certainty and regularity of

income from invested funds. The State holds in trust for the college \$116,000, and income from regular sources as well as from invested funds (apart from the temporary gift of \$7,000 a year for five years) represents an investment of about seven hundred thousand dollars. This does not include, of course, the 'Hatch bill' appropriation of \$15,000 per annum. In addition to this friends of the college have pledged \$7,000 a year for five years towards its 'running expenses.'"

The session of 1887-88 marks the one hundred and nineteenth year of the college and the sixth of President Gates' administration.

NEW YORK.

The University of the State of New York comprises, according to the latest report of that body, thirty-eight colleges, universities, and professional schools. Of this number seventeen would properly be included in Table 49, or represented therein by a department. All of these have reported to this Office for the current year.

The relation to the university stimulates the work of the colleges in various ways. It secures an interchange of opinions on the part of college officers and professors as to methods of instruction and discipline, material appliances, and other conditions of excellence, and excites them to a generous rivalry in the endeavor to secure that public recognition upon which the institutions depend for patronage and endowment.

The university examinations of secondary schools assist materially in keeping up the standard of the Freshman classes and in bringing about uniformity in admission requirements in the colleges of the State.

The reports received at this Office for the current year show vigorous and successful activity on the part of the colleges of the State. These indications are found chiefly in particulars included in the statistical record.

The following additional particulars have been supplied by letter or printed report:

In his report for the current year, Dr. Charles Kendall Adams, the president of *Cornell University*, notes the following among many interesting particulars relating to the progress and work of the university:

From a comparison of the statistics of the past four years it appears that the attendance has risen from four hundred and sixty-one to one thousand and twenty-two, while the number of scholarships has increased from one hundred and eighty to three hundred and twenty-seven. In other words, the rate of increase in the number of paying students has been more rapid than that of non-paying. The rate of increase for women students has been a little above the rate for men.

Efforts have been made within the last two years to regulate a little more carefully than heretofore the method by which students are admitted from approved secondary schools. After careful examination of the record of students in successive Freshman classes the faculty have determined not to admit candidates upon the regents' pass-cards unless the applicants hold also the diploma indicating that the studies of the preparatory school have been completed.

Notwithstanding the building operations of the last two years, serious difficulty is felt in the effort to accommodate the great number of students. The departments of chemistry and physics have been so much crowded that much of the instruction has had to be duplicated the past year. The rapidly increasing attendance also creates a demand for an increase in the teaching force. In discussing this necessity President Adams presents the following important considerations as to the relative strain of different kinds of instruction upon the teachers' energies. "If too many hours of class-room work are demanded of the teacher his energies become relaxed and the quality of his instruction is thereby impaired. If, on the other hand, he is employed for a fewer number of hours than he can practically give without depleting his energies and thus injuring the quality of his instruction, the system imposes a needless drain upon the treasury of the university. The effort, therefore, should be to secure the golden mean between the two extremes. As to the number of hours a teacher should be employed in the class-room no inflexible rule can be given. There are some kinds of work that are vastly more exacting than others. An instructor who lectures, who is obliged to prepare the material which is to be presented to his classes from day to day in order to bring it to them with reasonable freshness, and in a manner to produce the strongest and deepest impression, might, even though he were to lecture but three or four times a week, give more real work to the university than another instructor who should spend his time for the most part, either in teaching the elements of a language or in guiding students in their investigations in a laboratory, even though he were to give to the important work of instruction twenty or even thirty hours a week. This is but another way of saying that in some of the courses and methods of instruction it is necessary that the teacher should do his principal work in his own private study, while in others it is necessary that he should do nearly the whole of it in the presence of his pupils. These considerations

make it absolutely impossible to lay down any general rule as to the number of hours that instructors should devote to their work. Indeed, I know of no rule that can be applied, except the one that the number of hours should be regulated in each individual instance by the determination to get the largest and best results possible from the teaching force employed."

The large increase in the number of students also suggests the advisability of raising the requirements for admission in some of the courses.

The endeavor to provide for the wants of worthy students who can not possibly complete a four years' course has led to the arrangement of optional courses with admission requirements below the regular standard. "If," says the president, "students of this class are qualified to enter the different courses which are taught mainly by lectures, no very considerable addition to our teaching force would be required by their presence; but large numbers of them enter the courses in French and German, where the class has to be divided into small sections, and consequently their presence has formed an important element in the necessity of increasing the teaching force in those departments. While it is true that a considerable number of this class of students enter the university every year with a view to making up the deficiencies in their preparatory course, and ultimately acquiring a full standing in the class, it is at least doubtful whether it would not be advantageous, even to the students themselves, if we were to require that they should fully complete their preparation before they are admitted to university classes.

"The embarrassment experienced has been further increased by another fact of a similar nature. In some of the courses a knowledge of French and German is required of applicants for admission. In other courses the requirements are of another kind. It is therefore necessary to teach certain of our students the elements of French and German. When, therefore, a student having inadequate knowledge of French or German applies for admission to one of the courses in which those languages are required, a strong pressure has been brought to bear upon the faculty to permit students with such deficiencies to enter the beginning classes in those languages, and thus complete in the university the requirements for admission. This is not an unusual practice in American colleges, but it is a practice which, in my opinion, can only be justified by peculiar circumstances. If the teaching force is so large and the attendance of students so small as to make additional numbers in the classes desirable, such a method may be advantageous to the students without imposing any special disadvantage upon the university. But if any such condition ever existed at this institution, it is certain that it exists no longer. The faculty in the course of the past year have had this subject in all of its phases under careful consideration, and have decided, first, that after 1889 no students will be admitted to optional courses, excepting on condition of having passed an examination for admission to some one of the courses leading to a degree; and, secondly, that no student having deficiencies at the time of admission will be allowed to make up those deficiencies by entering any classes in the university. While this legislation will tend somewhat to reduce the number of the entering class, it will, on the other hand, tend, by securing students of greater maturity, to improve the grade of scholarship. It will also remove the cause of a very prevalent complaint that the university has constantly tended to draw away from the preparatory schools a number of students before their work of preparation was completed. That the legislation of the faculty on this subject has been wise, it seems to me will admit of very little question. The university ought not to put its vast material equipment and its other facilities for advanced instruction to doing the work of the preparatory schools. Nor ought it to encourage pupils to leave the preparatory schools before they are fully equipped for entering upon the higher work of the university."

Considering the very elaborate provision made by the university for instruction in the various subjects relating to agriculture, President Adams advises that these be incorporated into a college to be known as the College of Agriculture.

The subjects which he would have included are general and experimental agriculture, agricultural chemistry, botany, veterinary science, entomology, and horticulture.

The great importance attaching to the study of political economy and finance, and the interest which has been excited in the instruction in these subjects provided by the university during the past forty years, has led to the establishment of a professorship of political economy and finance, to which chair Prof. E. Benjamin Andrews, LL. D., has been called. Professor Andrews has occupied the chair of history and political economy at Brown University, where he has achieved marked success.

A school of law has been opened in the university during the year under review, and also a school of pharmacy.

Dr. F. A. P. Barnard, president of *Columbia College, New York*, in his report for 1887-88, discusses as usual many conditions having an important bearing upon the general progress of higher learning.

The total attendance in all departments of the college for 1887-88 was the largest hitherto recorded; as compared with the attendance of last year it showed an increase of sixty-one students.

The working system.—With reference to a change in the working system President Barnard observes: "In past years it has been customary to present a statement of the relative scholarship of the students in the School of Arts at the close of each year. This has been founded on the results of a system of marking for the values of scholastic performances of the students in the several departments. As much dissatisfaction has been expressed by both students and faculty with this artificial method of estimating merit, it has been resolved to try the experiment of discontinuing the numerical marking system, and in place of it require semi-annual reports from each instructor, of the names only of those who are proficient in each study, and of those who are deficient; in order to provide honorable distinction to the most meritorious, each head of department is required to report at the close of the final examination in each year the names of those students, not exceeding three in number, who, in each class, have displayed the greatest excellence in the studies of his department; and any student who is so reported as proficient in all departments is to be reported as an honor man. The names of the honor men are to be recorded in the register of the ensuing year. This plan having been introduced in the course of the current year, the results will not be reported until the close of the final examination, and will be given in succeeding reports hereafter. Thus far the plan seems to be regarded as likely to prove successful."

Latin and Greek electives.—The elective system was adopted by Columbia more than twenty years ago. At present all the studies of the Senior year are elective, while about one-third of the time of the Juniors is appropriated to electives. It follows that certain studies will be elective by both Seniors and Juniors, and others by Seniors only.

The following table shows the proportion of each class choosing Greek and Latin in 1887-88:

	Seniors.	Juniors.	Total.
Number in class	48	44	92
Number electing Greek	12	4	16
Number electing Latin	28	20	48

In addition to this elective work, Latin and Greek are each compulsory upon the Junior class for two hours weekly throughout the year.

The expansion of the professional and other associated schools is an interesting and significant fact in the recent history of Columbia College.

The graduate department, which originated nearly twenty years ago in the system of prize fellowship established, was formally constituted in 1880. The school of political science, created at the same time, makes provision for the subjects which in foreign universities are included under the "philosophical faculty." These two departments, with the school of library economy, opened in 1887, and the professional schools, "fall," observes Dr. Barnard, "in the province of university instruction, and there is, therefore, in the inevitable drift of things, a tendency to concentrate our energies upon the graduate department." "This," he says further, "has been so distinctly perceived by the trustees that there has been a distinct effort made from time to time to convert Columbia College altogether into a school of post-graduate instruction. About thirty years ago this effort assumed the form of a publicly declared purpose, and after a very elaborate investigation resulted in the constitution of a definite university organization. The time was not ripe, however, for so large a step of progress, and the effort failed to prove a success. Out of it, however, grew the Law School, which, meeting a well-ascertained public want, proved immediately successful and has been permanently maintained. Some years later the School of Mines appealed to a public want similarly ascertained, and was accordingly in like manner successful. The operations of the institution have in recent years extended over so wide a field that the original college has been entirely overshadowed, and a doubt has been raised whether its usefulness has not ceased. A resolution is now pending before the board inquiring whether it is not advisable that the whole scheme of education in Columbia College should be raised to a higher plane, and which involves the further question whether it is not advisable to discontinue the department of arts. So long as this question remains under discussion before the governing board, it would not be becoming in the undersigned to pronounce an opinion upon it here. It may be permitted, however, to say in this place, that if the question were merely as to the sufficiency and importance of the work proposed, there could be no doubt that our faculties could find ample and adequate occupation if they were confined to giving instruction exclusively

to graduate students. On the other hand, such has been the excessive multiplication of undergraduate colleges in our country in recent years that the business of those colleges is greatly overdone, and it would certainly be a material benefit to the educational interests of our country if a large proportion of the existing colleges could be suppressed.

* * * "New York City has about a million and a half of inhabitants. It should be capable of furnishing, therefore, at the ratio of 1 to 2,500, six hundred undergraduate students in arts. This is not a number greater than could be comfortably provided for in a single college. Nevertheless we have three, not counting the minor colleges under the care of the fathers of the Roman Catholic Church. It would not be, therefore, educationally a misfortune if Columbia College should cease to exist as a school for undergraduate students. The city would still be fully supplied with educational advantages, while there could be no doubt that this institution could be more profitably employed by confining itself to the field of superior education. Whatever be the policy pursued in this matter, nevertheless it is the unavoidable tendency of things to press upon Columbia College more and more constantly from year to year the duty of providing for the wants of the superior class of students, that is to say, the business of proper university instruction. The location of the institution in the greatest city of the continent is peculiarly favorable to such an undertaking, and, though the college is not possessed of funds sufficient to enable it to carry out this complete design, it is hardly to be doubted that provision may, sooner or later, become sufficient to accomplish this object."

The success of the School of Library Economy is evidenced by the fact that the applications for admission were so numerous as to call for the exercise of considerable severity in the selection.

Though the students had been promised only three months' tuition, at their unanimous request the time was extended to four months. The value of the instruction to the students may be judged by the fact that before the close of the brief session of the school last year every student attending was already under solicitation for appointment to some place worth accepting as a librarian or assistant librarian in some desirable locality in the country.

The advantage of the increased accommodations of the School of Medicine was seen in the greatly increased attendance, which exceeded that of 1886-87 by two hundred and three.

The School of Law has been marked during the past year by an apparent recovery from the temporary depression which had followed the adoption of the rigorous rules in regard to admission to the bar imposed by the judges of the court of appeals, and the attendance has once more nearly reached the extraordinary totals of the years 1875 and 1876.

The scheme of extending the course of instruction to a longer period, which has been so long under consideration, although not yet definitely decided on, has been the subject of careful consideration by a select committee, and will probably be effected and carried into operation during the ensuing session.

The remaining associated schools have maintained their usual efficient operations throughout the year. In addition to the summer classes in surveying, mechanical engineering, and practical geodesy, connected with the school of mines, a summer class in chemistry was held for the first time in the session of 1887.

Dr. Robert B. Fairbairn, president of St. Stephen's College, Annandale, writes in his return to this Office that "the college was begun and founded under the auspices of the Episcopal Church, in the diocese of New York, for the classical training of young men intending to enter the ministry." It is entirely classical, no theology being taught.

The charge for board, washing, fuel, lights, and partly furnished rooms is \$225 per year. The income from this source maintains the current expenses of the college. There is no other charge. The salaries of instructors are furnished by the trustees.

Dr. D. H. Cochran, president of the *Brooklyn Collegiate and Polytechnic Institute*, calls attention to the fact that the greater part of the students leave at the end of the third year, receiving a diploma for which only one modern language is required. To obtain the degree of B. A. or B. S. requires at least five years in the college department. In the degree courses two languages are included.

"The greater part of our students leave at the end of the third year in collegiate department, receiving our diploma, for which only one modern language is required. To include both languages, French and German, it will require at least five years in collegiate department to get degree of B. A. or B. S. The work in modern languages extends through five years,—three years daily recitations, two years every other day.

"The test required for graduation is to put a page of ordinary journalism, not simple narrative, into good French and German at sight, and to speak the languages fluently and correctly."

Nelson F. Robinson, secretary of the *St. Lawrence University*, Canton, states that two years ago four hundred and fifty persons subscribed \$51,088 for the endowment of the

college. About twenty-six thousand dollars have been subscribed by various benefactors upon a second fifty thousand dollars endowment fund on condition that the whole sum projected is raised.

At the twenty-ninth annual commencement, held June 27, 1888, President Gaines resigned the presidency after seventeen years of service: Rev. Almon Gunnison, D. D., pastor of All Souls Church, Brooklyn, was elected his successor, but has not yet signified whether or not he will accept the office.

Hamilton College, Clinton, has just completed the Knox Hall of natural history, which makes an important addition to its excellent equipment for instruction in science. "Through the liberality of the late Hamilton White, of Syracuse, the college collections in natural history have been enriched by the herbarium collected by the late Dr. H. P. Sartwell, of Penn Yan, and well known in scientific circles as a very extensive and valuable exhibition of our North American flora. This herbarium is the result of fifty years of botanical study, research, and correspondence. It contains eight thousand samples of plants skilfully cured, accurately labeled, and conveniently classified in sixty-two handsome volumes.

"Judge Thomas Barlow, of Canastota, has supplemented the recent gift of his large and valuable entomological collection by an almost equally valuable collection in ornithological and comparative anatomy. The college collections are now very extensive and of great importance, because so fully representing the fauna of central New York. Among the many and interesting specimens is one array, probably unique. Side by side are three generations of the seventeen-year locust (*cicada septendecim*, Linn.), collected by Judge Barlow, and from the same locality on the 12th of June, 1845; the 11th of June, 1865, and the 17th of June, 1882."

Madison University, Hamilton, has recently completed a new chemical laboratory valued at twenty-five thousand dollars.

This university has "opened its doors wide to the young men of New York, New Jersey, Connecticut, Massachusetts, and Vermont by establishing competitive examinations for free tuition scholarships, in charge of committees located at various central points. The examinations will be opened to all Christian young men fourteen years of age and older, resident within the territory covered by the committee."

The University of Rochester has received during the year benefactions amounting to \$108,074. This includes fifty thousand dollars from D. A. Watson, Esq., for the professorship of political economy.

Among recent additions to the equipment of the university is a chemical laboratory erected at an expense of twenty-five thousand dollars by Mortimer F. Reynolds, Esq., president of the Rochester Savings Bank, in memory of his brother, the late W. H. Reynolds, Esq., a member of the university board of trustees.

The library of Prof. Von Ranke, of Germany, which has been secured by *Syracuse University*, includes upwards of fifty thousand volumes. Though the larger part of these volumes are historical, there are rare and valuable works on almost every branch of literature. The collection is said to be especially complete in its representation of the great authors and thinkers of Germany. In the collection are a number of Von Ranke's manuscripts; a portrait of the historian, other paintings by German artists, and the desk, chair, and inkstand used in his study.

The University of the City of New York is to have two new chairs established. One will be of English, an anonymous friend of the university having pledged three thousand five hundred dollars per annum for five years for its support; the other will be of history, the Alumni Association of the university having arranged for the maintenance of such a fellowship.

NORTH CAROLINA.

The University of North Carolina, Chapel Hill, has completed nearly a century of honorable history, having been chartered in 1789. The trustees, upon whom the work of organization devolved, were among the most distinguished citizens of that day. As stated in the current catalogue, Samuel Johnston, one of the first Senators of the United States from North Carolina, was chairman. Governor Benjamin Smith was the first benefactor, giving twenty thousand acres of land in Tennessee. The most active worker for the new institution was William Richardson Davie, called the "Father of the University," afterward Governor of the State and Commissioner to France.

On October 12, 1793, annually commemorated as "University Day," the corner-stone of the Old East Building was laid. The buildings are now nine in number, with ample dormitories, recitation rooms, laboratories, and public halls, situated in a campus of fifty acres, covered with forest trees, and adjoining over five hundred acres of university woodland.

The university includes undergraduate and post-graduate departments and a law school. While maintaining the usual curriculum of classical colleges, it has developed a particularly strong course in English language and literature. The provision for bringing the advantages of the university within the reach of all worthy but poor students deserves special mention. The annual fee and tuition amount to but seventy dollars, and board may be had at prices ranging from eight to thirteen dollars a month. The entire annual expense need not, therefore, exceed three hundred dollars and may be reduced to two hundred.

The late B. F. Moore, of Raleigh, bequeathed to the university five thousand dollars, the interest of which is to be devoted to paying the tuition of students.

The Deems Fund was instituted by the Rev. Dr. C. F. Deems, pastor of the Church of the Strangers, New York, as a memorial of his son, Lieut. Theodore Disosway Deems, who was born at Chapel Hill while his father was in the faculty of the university. It is intended to assist needy students by loans. In 1881 this fund was greatly enlarged through the munificence of Mr. William H. Vanderbilt. On the 1st of February, 1888, there were notes, the principal of which amounted to \$13,060.50, representing current loans to students. To that date one hundred and ten students had been helped by the fund. As payments are made new loans will be made to applicants who meet the requirements. They must come with good recommendations for character; or, if members of the university, must have demonstrated to the faculty that they are worthy of assistance. The loans are made at six per cent interest, on satisfactory security, and for a sufficient length of time to make the payments easy.

Miss Mary Ruffin Smith, of Orange, has left a valuable tract of 1,440 acres of land in Chatham County, known as the Jones Grove Tract, the income of which, or of the proceeds if sold, shall be used for the education of such students as the faculty may designate.

Part of this income will be available during the ensuing autumn.

Davidson College, *Davidson*, reports an increase of \$7,500 in its scholarship funds through the liberality of friends.

The catalogue of *Trinity College, Trinity*, for the current year gives the following particulars relative to the organization of the work:

"The plan of reorganization of Trinity College, submitted to the board of trustees and approved by them (May, 1888), provided that the preparatory department be henceforth abolished, the commercial department be incorporated into a regular college course, and the requirements for admission to the college be gradually raised.

"As now organized the college is divided into two distinct departments, the academic and the scientific, each two years in length, and together constituting a four years' college course.

"The former corresponds to the Freshman and Sophomore years in American colleges.

"The studies of this department form three separate and independent courses, viz.: The classical course, in which Latin and Greek are the distinguishing features; the modern course, distinguished by French and German, and the English course, in which no language except English is required.

"The quantity of work and topics of study are fixed, except that in the English course book-keeping and commercial law may be substituted for pedagogics and drawing, the latter studies being especially adapted for teachers in the public schools and the former suited particularly for such as may after leaving college enter mercantile life.

"These courses have in common an equal amount of pure mathematics, history, and English.

"Each student is required to take one and may not take more nor less than one of the three academic courses.

"The scientific department corresponds in time and work to the Junior and Senior years of American colleges. It is divided into schools capable of indefinite expansion numerically, each extending through two full years without any very marked line of division between them. These schools are so organized as to give a limited amount of connected work in the continuous and progressive study of particular subjects for two years. Each school comprises one or more courses of two years requiring from two to four hours of recitations or lectures per week."

OHIO.

The year has been marked by special activity on the part of the friends of liberal education in Ohio, which is doubtless due in part to the stimulating influence of the centennial celebration of the first settlement of the North-West Territory.

As observed by Dr. Fairchild, president of Oberlin College, in a recent article: "With three exceptions the colleges of the State have come into existence under the impulse of denominational interest and need, except as local enterprise or individual

ambition has operated here and there." The same agencies have sustained the work to the present time, manifesting themselves with renewed vigor during the current year.

By reference to Table 49 it will be seen that the total benefactions to colleges in the State during the year amounted to \$450,072, distributed among twelve institutions.

The State appropriations were \$19,400 to the Ohio State University at Columbus and \$5,000 to Ohio University at Athens.

The *Ohio State University, Columbus*, reports several changes in its able faculty, a number of professors having resigned to accept positions elsewhere. Their successors have been carefully chosen, and it appears that the reputation of the teaching force will be well sustained. The need of larger resources for the rapidly increasing demands of the university is urged upon the Legislature and upon individual patrons of learning in the State. In particular the desirability of substituting a fixed and permanent tax for the uncertain State appropriation, which is the main support of the university, is presented.

The department of physics has secured valuable additions to its equipment during the year.

The department of history and English language and literature has also been divided; history and political science forming one division under Professor Knight, and English language and literature a second, under Professor Welch.

The introduction of the course designed for original study and research in the institutional and financial history of the United States has proved eminently successful. It is believed to be the first experiment of the kind in Ohio. The work has been facilitated by the addition to the library of many valuable books and documents relating to American history.

The catalogue of *Buchtel College, Akron*, for 1887 makes mention of the following donations:

On June 23, 1887, at the graduating exercises, Hon. J. R. Buchtel, of Akron, made the largest and most generous donation which the college has ever received, amounting to \$174,400.

By the will of Mr. Henry Ainsworth, of Lodi, Ohio, who died July 31, 1886, the college is made a residuary legatee of his estate, and will probably receive therefrom not less than twenty-five thousand dollars. This last gift of Mr. Ainsworth swells the total sum of his donations to the college to over seventy thousand dollars, and makes him its most liberal benefactor, its generous founder only excepted.

Prior to the death of Lydia A. E. Messenger, in January, 1887, she gave five thousand dollars to the college, to be added to the Messenger Fund.

In July last two generous friends of the college and of education, Hon. George W. Crouse and Mr. Ferdinand Schumacher, both of Akron, each gave five thousand dollars for the erection of a gymnasium, which is now nearly completed, and will be known as the Crouse gymnasium. Mr. Buchtel's subscription to the fund for this building was one thousand dollars; and by means of these and other subscriptions from friends the finest gymnasium in the West will soon adorn the grounds.

Other donations to the amount of five thousand three hundred dollars are recorded.

The *University of Cincinnati* reports that in the restoration of the university building after the late fire the department of physics has been supplied with entirely new and commodious quarters.

The new chemical laboratory is of ample size, occupying the greater portion of the upper story of the university building, and is well provided with the requisite appliances and facilities for the easy and rapid execution of analytical and experimental work.

The libraries of *Adelbert College, Cleveland*, and of its literary societies contain about twenty-five thousand volumes. Large accessions have been made during the past year; the largest in the purchase of the private library of the late Prof. Wilhelm Scherer, of the University of Berlin.

Mrs. Samuel Mather's gift of two thousand dollars has been applied to the completion and binding of sets of American and English periodicals, and to the purchase of the following classes of works:

- (a.) English, French, and German bibliography.
- (b.) English, French, and German encyclopædias.
- (c.) Biographical dictionaries.

(d.) Dictionaries of modern languages, and the publications of the Early Text Society for the last ten years.

- (e.) Atlases and illustrated works on history and art.

- (f.) Miscellaneous works, mostly of a reference character.

Mr. and Mrs. C. W. Bingham have furnished the money (about \$450) for the purchase, during the last summer, of the great publications by the German Government of the re-

sults of excavations at Olympia and Pergamon. These supply generous material for the illustration of Greek and Roman art and archaeology.

The excellencies of the college library thus consist at present in a good bibliographical collection, complete sets of many valuable literary and scientific serials, a very full department of German language and literature, and a large list of current periodicals.

The Ohio Wesleyan University, Delaware, appears to be entering upon a new building era. Plans for a new gymnasium have been adopted, and a building fund accumulated. Meanwhile the grounds in the south-east portion of the college campus have been graded and put in excellent condition for out-of-door sports. This has been done at an expense of nearly two thousand dollars, most of which has been met by the contributions of students themselves, together with the faculty.

Considerable progress has been made during the year in providing for the proposed new music and art hall, for which purpose a donation to the amount of fifteen thousand dollars has been received from Calvin Whitney, Esq., of Norwalk, Ohio.

The pressing need of a new chapel has been recognized by friends of the university, one of whom offers ten thousand dollars toward the building, provided a sufficient sum is raised for this object within eighteen months.

Assurances have been made by other parties enough to indicate that the church and the constituency of the university are ready to give their means for this purpose.

Peculiar interest centres in *Marietta College* on account of the historic associations which cluster around its location, and the part which it has borne in promoting the cause of learning in the State.

Marietta received a full college charter in 1835, although, like all pioneer institutions, it was forced to make provision for preparatory work. The purpose of marking distinctly the line between this and college work, and of maintaining the traditional college standards, was from the first steadily pursued. The preparatory work has developed into Marietta Academy, one of the best secondary schools in the country. It derives strength and character from the supervision of the college faculty, but has a sufficient staff of instructors to prevent drawing upon the college professors for routine work. The school has proved a valuable feeder to the college and has assisted materially in keeping up the standard of the Freshman class.

Within the past few years the college curriculum has been modified and extended in accordance with the best conceptions of liberal culture combined with due considerations of the college resources, and the requirements of its field of operations.

Progress is reported in the course provided for graduate students.

In the case of non-resident students, three years of study, completing a course marked out by the faculty and pursued under their direction, together with the presentation of a satisfactory thesis, entitles college graduates to enter an examination on the same for the degree of doctor of philosophy. Three years is the minimum time required of non-resident candidates, and in the case of students not well prepared to enter on a chosen course, or whose occupation is too exacting, the term of candidacy will need to be prolonged.

It is understood that the degree will be given only on the ground of high attainment in some branch of knowledge, manifested both by examination and by a thesis showing original investigation or original treatment of a subject.

The expenses at Marietta are moderate and generous; provision has been made by means of prizes and scholarships for worthy students who have not the means to defray the expenses of a liberal education.

The general catalogue just published shows a total of five hundred and eighty-two graduates from 1835 to 1887, inclusive. Of these one hundred and seventy-six became clergymen.

During the current year substantial additions have been made to the college library. The college has an able faculty, and under the presidency of the Hon. John Eaton has the promise of advance in all the conditions of material prosperity and scholastic efficiency. It is worthy of note that the number of college students has increased eighty per cent. during Dr. Eaton's administration.

Altogether, upwards of seventy-five thousand dollars have been added directly, or certainly assured, to the funds of the university during the year.

The report of *Oberlin College* affords the following particulars: "When Oberlin celebrated its semi-centennial in 1883 its buildings were utterly inadequate to the work. Four years have witnessed a remarkable change. Six important buildings, five of them stone, have arisen, and there is still the prospect of a fine memorial building to be erected on the site of the old homestead by Mr. F. N. Finney, of Milwaukee, Wis., to the memory of his father, the late President Finney.

"When completed Warner Hall will extend one hundred and fifty feet on Professor Street and one hundred and twenty feet on College Street. The more important of the wings, containing the Concert Hall, is in process of erection. It is the gift of Dr. and

Mrs. Lucien C. Warner, of New York City, who have expended upon this central portion about forty-two thousand dollars, to which must now be added something more than twenty-five thousand dollars, the cost of the new wing."

In addition to his gifts of money, "Dr. Warner has given his personal attention to every detail of the plans and has made the contracts with the builders. Probably no important building ever cost the college officers less anxiety and care, and certainly no building has proved better adapted to its use. It is practically four stories in height, which stories are made accessible by easy and well-lighted flights of stairs and also by an elevator, which is kept constantly running. Here will be found a delightful and ample entrance hall, offices, library, rehearsal rooms, lesson rooms, and practice rooms. But the building is serving a higher and nobler purpose than is indicated by these arrangements. Before its erection there was a growing feeling that Oberlin might have something of a mission in preventing that divorcement between musical culture and spiritual culture which seems to threaten on every hand. The traditions of the place, the presence in large numbers of both sexes, and the counter-balancing influences of other forms of culture gave Oberlin the greatest advantages in attaining this high ideal. But this building, more than anything else, has given a visible shaping to these thoughts in the minds of all and has been the direct means of the adoption of the Conservatory of Music by the trustees as an integral part of the university work at Oberlin College."

Wittenburg College, Springfield, reports that the new building begun in 1883 is finished and has been occupied since the beginning of the present collegiate year. It is a large, well-lighted structure, admirably adapted for college purposes.

PENNSYLVANIA.

Table 49 presents the statistics of twenty-four colleges and universities of Pennsylvania, whose reports for the most part show that the year has been one of successful operation. The total of gifts and benefactions received was \$524,280, distributed among seventeen of the institutions.

The following are the most important particulars of the year's record beyond the information included in the tabulation:

The advance of the *University of Pennsylvania, Philadelphia*, is perhaps the most notable fact in the recent history of superior education in the State.

The graduates at the commencement, June, 1887, outnumbered those of any previous year, not including the medical school, which has its separate commencement. The enrolment of undergraduates for the present year is slightly in excess of the preceding year, and the total enrolment exceeds that reported for 1886-87 by one hundred and thirty-four.

The increase in equipment, especially in the higher departments of science, the expansion of the advanced course, the incentives to research which are offered, the high reputation of the professional schools of the university, are conditions which explain its rapidly increasing influence and reputation.

A new and extensive library building for the university is in contemplation; the estimated cost is about one hundred and fifty thousand dollars.

The university sustained a severe loss during the year by the burning of the medical hall. Medical collections of great value and many rare works of art were destroyed.

The amount of donations and bequests reported is upwards of ninety-seven thousand dollars. The purposes to which these are to be applied are specified in a subsequent table.

The large benefactions reported this year by Swathmore College, viz, one hundred and sixty thousand dollars, are for the endowment of four professorships.

The *Western University of Pennsylvania, Allegheny City*, has a productive fund of two hundred and seventy-five thousand dollars, the income of which is devoted to meeting current expenses, thereby reducing the rates of tuition, which range from sixty to eighty dollars per annum.

The university has a fine observatory, which was in charge of the distinguished scientist, Dr. Samuel P. Langley, until November, 1887, when he resigned to assume the position of Secretary of the Smithsonian Institution at Washington. In his report dated May 23, 1888, Dr. Langley states that the routine observations for the time service have been continued in the hands of Mr. Very, who has been instructed in past years in all the methods devised by Dr. Langley until he has become extremely skilful in their application. Dr. Langley expresses the belief that there is no observatory anywhere whose system surpasses that of the Western University in its practical convenience, in the accuracy of its results, and in the simplicity of the methods for making them useful to railroads, cities, and the public generally.

Muhlenberg College, Allentown, has always maintained a strong work in the classical and in the modern languages. Greek and Latin are both required for the A. B. degree, and the German language and literature are included in the regular course.

Of fifty thousand dollars donated to the college during the current year ten thousand were to be added to the endowment of the Greek professorship.

The Catalogue for 1887-88 of *St. Vincent's College, Beatty*, records the death of the Arch-Abbott Boniface Wimmer, O. S. B., the founder of St. Vincent's Abbey and College. His death, which occurred December 8, 1887, closed forty-one years' active service in the cause of Catholic education in the United States.

Dickinson College, Carlisle.—Through the liberality of Hon. Jacob Tome, of Port Deposit, Md., a new scientific building has been erected for Dickinson College, which adds greatly to the facilities for science instruction.

The James W. Bosler Memorial Library Hall has been completed, and supplies provision which the college has long needed. In this hall the valuable libraries of the college have complete protection and all requisites for convenient use and proper display.

The hall contains also an audience-room having a seating capacity for about eight hundred persons. The want of such a room has been a serious inconvenience in the past. A third addition to the equipment of the college is a new gymnasium, supplied with the most approved appliances. A competent director has been placed in charge and the college is now fully prepared for the important work of physical culture.

The trustees of the *Pennsylvania Military Academy, Chester*, have appointed Col. Charles E. Hyatt to the presidency, made vacant by the death of his father, Col. Theodore Hyatt. Having been associated with his father in the conduct of the work for sixteen years, Colonel Hyatt brings to the presidency a full understanding of the policies which have proved eminently successful in the past history of the academy. In his report for the current year Col. Charles Hyatt announces that after 1891 the degree of civil engineer will give place to that of bachelor of civil engineering, and that a post-graduate course will lead up to the former degree after 1891.

Lafayette College, Easton, presents in its able faculty and splendid equipment for science instruction provision for full-rounded, symmetrical education. The undergraduate may choose from six courses. Three of these are general, viz: classical course, leading to the degree of A. B.; Latin scientific to the degree of B. Ph.; general scientific to the degree of B. S.

Three of the courses are technical as follows: Civil engineering, leading to the degree of C. E.; mining engineering and metallurgy, leading to the degree of M. E., and a special course in chemistry, leading to the degree of B. S. in chemistry.

Post-graduate courses are also maintained in philology, physics, chemistry, biology, etc.

The increase of appliances which has been a marked feature of the recent history of Lafayette has been accompanied with a development of the curriculum, the extent of which may be inferred from the fact that the old Lafayette course of two thousand and seventy recitations and lectures has developed into nine thousand two hundred and sixty-three. This progress has been made without any sacrifice of logical consistency in the arrangement of studies or of thoroughness in their pursuit.

Lafayette enjoys peculiar distinction for the conduct of physical culture and for the application of the scientific method to linguistic studies.

Of one hundred thousand dollars donated to *Pennsylvania College, Gettysburg*, during the year thirty thousand are to be applied to the endowment of the chair of mental and moral science, fifteen thousand are for a memorial chapel, and twenty thousand for a new hall.

Grove City College, Grove City, reports the completion of the new building begun in 1886. Provision has been made in this for the scientific department and two gymnasiums, one for either sex.

Dr. Thomas Chase, president of *Haverford College, Haverford*, resigned in October, 1887, on account of impaired health. This act severs an official connection extending over thirty years. President Chase is a man of ripe scholarship and sound judgment, and under his guidance the college has achieved an enviable reputation for thorough instruction and efficient discipline. At the time of his resignation President Chase was travelling abroad, his place being temporarily filled by Dr. Pliny E. Chase, a member of the faculty. The death of the acting president occurred in December, and the selection of a new president claimed the attention of the managers. After careful deliberation the choice fell upon Isaac Sharpless, who, for several years, had served as dean of the faculty. President Sharpless was inaugurated on the 19th of May.

Several important accessions have also been made to the faculty during the year.

The David Scull Fund, which became available during the current year, has been applied to the endowment of the professorship of biology. The amount thus far received is thirty-four thousand dollars, to which six thousand will shortly be added.

The debt of the corporation, which, at the close of the last fiscal year had been reduced to six hundred and ninety dollars, has been entirely extinguished.

Bucknell University, Lewisburg, has received from Mr. William Bucknell, of Philadelphia, a gift of twenty-five thousand dollars, which will be used in enlarging the present buildings. The demands of the art and music departments will be specially considered in the new structures.

"The university as now organized comprises three departments: The college, for young men who wish a full course of study; the academy, for young men or boys preparing for college, for teaching in the public schools, or for business; and the institute, for young women. These three departments occupy separate buildings, but are under one corporation and have one president, and hence enjoy the advantages of inter-relation and co-operation without the disadvantages of too close connection."

Central Pennsylvania College, New Berlin, has been organized as a college for one year only. Pending the securing of an endowment fund it is supported by contributions from churches of the Evangelical Association.

RHODE ISLAND.

Brown University, Providence, has received gifts and bequests during the year to the amount of \$137,229. Of this sum \$100,000 are to be applied to the building of a physical laboratory, \$1,000 to the gymnasium fund, and \$5,990 to the endowment of a professorship of natural theology.

The spirit of toleration which characterized the original settlers of the State is stamped upon the university charter, which requires Baptists, Congregationalists, Episcopalians, and Quakers to be represented in specified numbers in its government.

SOUTH CAROLINA.

In December, 1887, *South Carolina College* was enlarged into the University of South Carolina, at Columbia, with a branch at Orangeburg (Claffin University).

In his message to the General Assembly covering the operations of 1887-88, Governor Richardson makes the following statement with reference to the reorganized institution: "To meet the wants of all classes of our people provision was made in the amended charter for a graduate department, a college of agriculture and mechanic arts, a college of liberal arts and sciences, a college of pharmacy, a normal school, and a law school. The details of organization were left to the board of trustees of the university. The work of preparation has been diligently pushed, and the institution stands to-day complete in all its departments. In the selection of officers and teachers attention was largely directed to ability and special training; in the arrangement and adoption of courses of study and methods to thoroughness of instruction.

"The graduate department offers forty-two advanced courses of study, covering a wide range of subjects. The college of agriculture and mechanic arts, with its twenty-three teachers, its eleven carefully formulated courses for degrees and certificates, its numerous and well-equipped laboratories and shops, its farm, its appliances and ample provision for practical training, is an admirably organized and most promising school of technology. The college of liberal arts and sciences has eighteen teachers and four four-years' courses for degrees, each covering twenty-three special courses of three hours each per week in its several departments of instruction. The institution offers, in all its departments, one hundred and forty-eight courses, and has twenty-one lecture rooms and fourteen laboratories, in addition to twenty-seven other rooms used as shops, draughting-rooms, halls, and other public purposes—or sixty-two rooms in all. Every building has been repaired and improved, infirmaries and new offices have been erected, and the grounds put in excellent condition. It is not too much to assert that in the ability of its teachers, its well-arranged courses of study and methods of instruction, the completeness of its outfit, and the beauty of its situation and buildings, the university is one of which any State might be proud, and stands second to none in the South. Indeed, by competent judges outside as well as inside the State, it is already accorded such position. Its claims to excellence of work are established by the records of its recent graduates. Several of these are at the head of some of the most important secondary schools in the State. Some have firmly established themselves in scientific pursuits. Seven are now engaged as analytical chemists in private and collegiate laboratories. Others are engineers, geologists, farmers, etc. The institution is now attracting students from beyond our limits."

In the reorganization of the institution, the faculty has been enlarged, the additional members having been carefully selected with a view to maintaining the reputation which the college has always enjoyed on account of the ability of its teaching force.

The Rev. J. W. Flinn has been called to the chair of moral philosophy and the chaplaincy. He is a graduate of the University of Mississippi and of the Theological Seminary of Columbia, S. C. After the completion of his studies in the United States he made a special study of philosophy at the University of Edinburgh, under the famous Dr. Calderwood and Dr. Fraser, and of English literature under Professor Masson.

The chair of Latin has been filled by Dr. J. S. Murray, who left the profession of the law to devote himself to classical study. He pursued his studies at Johns Hopkins University, under the guidance of Dr. Gildersleeve, subsequently at the universities of Göttingen, Leipsic, and Berlin. At the last named he passed four years in an advanced course of study in classical philology.

Dr. E. W. Davis, who takes the chair of mathematics and astronomy, is a graduate of the University of Wisconsin, and Doctor of Philosophy at Johns Hopkins.

The arrangements made for the development of the scientific department show a determination on the part of the trustees to keep in line with the rapid advance of science in the South. The chairs of botany and zoölogy, of agriculture, and of analytical chemistry have all been filled by men who have had exceptional opportunities for study and research in their specialties, and who come to the university with established reputations. A chair of pedagogics has been established, to which the trustees have called Dr. E. E. Sheib, of Baltimore. This gentleman took the degrees of M. A. and Ph. D. at Heidelberg, and will undoubtedly exercise a great influence upon the teachers of the South through his conduct of his department of the university.

The development of South Carolina College for some time past has been largely in the direction of applied science. The mechanical department is very well equipped, and it is hoped that under the university organization the material appliances will be greatly increased. The trustees appeal to the Legislature and to the friends of learning in the State to follow up the work so auspiciously begun by the pecuniary appropriations necessary for its maintenance upon the same plane.

The several departments of the newly organized university, from which returns have been received, are tabulated in this Report as follows: The college of liberal arts, Table 49; Claflin University, Table 55; the law school, Table 67.

TENNESSEE.

The University of Tennessee, Knoxville, has elected Prof. F. L. Scribner, of the Agricultural Department, Washington, to fill its chair of botany and horticulture; Prof. H. E. Summers, of Cornell University, to the chair of zoölogy and entomology; and Prof. William E. Stone, of Göttingen, Germany, to be chemist at the Tennessee experiment station. All these are said to have accepted the positions offered, and will, doubtless, inspire the university with new life.

Bishop H. N. McTyeire, chancellor of *Vanderbilt University, Nashville*, reports the completion of a new building for law and dental departments, erected in the central part of the city, and a new building for mechanical engineering in the college campus. The latter affords provision for the improvement and enlargement of the department specified, for which purpose, and the increase of the library, the university has received during the year from William C. Vanderbilt, of New York, a gift of thirty thousand dollars. At their annual meeting, June 15, 1887, the trustees of the university resolved to discontinue all classes below the regular collegiate department. The maintenance of such classes, at first a necessity from the lack of good preparatory schools, is no longer deemed necessary. The trustees also appointed a committee to report on the advisability of admitting young women to equal privileges with young men.

Carson College, Mossy Creek, has recently opened a department of systematic theology in the interests of young men wishing to prepare themselves for the Christian ministry, but who can not conveniently attend a theological school.

Fisk University, Nashville, has made a good beginning in securing the necessary apparatus for illustrating the various branches of natural science. Laboratory work in elementary chemistry and mineralogy is now systematized and established, and it is hoped that similar opportunities may soon be afforded students in physics, elementary anatomy, and physiology, and eventually in astronomy.

A convenient and ample room contains a well arranged collection of over three thousand specimens in natural history, geology, mineralogy, and ethnology.

The reorganization of *Grant Memorial University, Athens*, has enabled the trustees to greatly strengthen the faculty and to offer courses of study equal to the high and well-balanced standards adopted by the first-class schools of our country and demanded by the culture and practical tendencies of the age. Beside important revision of the courses in liberal arts, philosophy, and science, a new department has been established with full courses in technical science. These courses have been carefully prepared with special reference to laying a broad, substantial foundation of technical and general knowledge, necessary for the successful prosecution of all the agricultural, mechanical, and scientific professions. They will be open this year to all students prepared to enter the Freshman classes.

The professional departments have been materially strengthened and the courses of study carefully revised.

During the past year very large additions have been made to the facilities of the natural science department, and the classes have had the benefit of practical instruction in

all branches of physical science and natural history. Apparatus and material costing over three thousand dollars have been procured and conveniently arranged for systematic use.

The new edifice for *Hiwassee College* is beautifully finished but not fully furnished. New halls have been fitted for the literary societies; the old halls, now used for recitation purposes, making more room—a necessity long needed.

The University of the South Seavance, reports encouraging prospects in the number of students and the increasing facilities for study. The new gymnasium and chapter house is a substantial stone structure. Other new buildings are contemplated.

TEXAS.

In their report for 1888 to the Governor of the State, the regents of the *University of Texas* present a complete statement of the condition and needs of the institution, of which the following is a brief résumé.

The endowment consists of bonds, land notes, and lands. The present value of the bonds held in trust by the State is \$549,300, yielding an annual interest of \$33,267.

The land notes held in trust by the State show a total of \$68,120.50 unpaid balance, on which the annual interest is \$4,636.11.

From first to last the university has received grants of land as follows: By act of Congress approved January 26, 1839, fifty leagues; one million acres set apart by the constitution of 1876; and one million appropriated by act approved April 10, 1883. The greater part of the original fifty leagues has been sold and converted into bonds and land notes; of the first grant of one million acres, 12,480 acres have been sold and 92,157 acres are under lease; of the second million acres none has been leased or sold.

"This," the regents observe, "is an unsatisfactory showing, and they urge that it is desirable to put those lands as fast possible in such a shape that an income may be derived from them. This they believe can be most readily done by placing the sale and lease of the lands in the hands of the regents." In support of this view they urge the fact that every other State which maintains a State university has turned over the lands appropriated for its support to the university authorities.

As regards the present condition of the university there is pressing need for funds for the completion of the building; for the equipment and strengthening of chairs already established in the academic department; for the creation of additional chairs; for the expansion of the law department, and for the organization of the medical department.

As the present income of the university, viz, \$44,919.39, is totally inadequate for these purposes, the regents ask an annual appropriation from the State until the fund from the endowment shall suffice to maintain the university on the basis originally contemplated. Twenty thousand dollars per year for several years would enable the university to bridge over what threatens to be a crisis in its history, and enable it to grow in strength and usefulness; and for this amount, therefore, the regents ask.

The South-western University, Georgetown, opened a new department for the accommodation and education of young ladies in 1878. "The prosperity of the enterprise and the increasing demand for a regular boarding department for young ladies have resulted in the erection of a complete female college building, with every facility and appliance for the higher education of women."

VERMONT.

The University of Vermont and State Agricultural College, Burlington, has a choice and extensive library containing twenty-three thousand seven hundred volumes, beside the eleven thousand seven hundred and seventy-five volumes that form the library of the late George P. Marsh, a collection of the highest value in the departments of philology, European literature and history, and physical geography. This collection is the gift of the Hon. Frederick Billings, of Woodstock. The library has now been carefully arranged by subjects, on the Dewey system, and accession and shelf catalogues have been written. A card catalogue on the dictionary plan is in progress, six thousand eight hundred and twenty cards having been prepared.

The commodious and beautiful "Billings Library," in which the books are stored, was erected at a cost of \$115,000. The apse, in which the Marsh collection is at present shelved, having become desirable as a reference and reading room, Mr. Billings this year generously increased his gift to \$150,000 by providing for the Marsh library an additional room even more elegantly appointed than the main building. The library is open seven hours a day for consulting and drawing books. The reading room is supplied with all the leading scientific and literary periodicals. Persons not connected with the university have free use of the books for consultation, and, on special permission from the president, are allowed to take them home. Students of the university, as residents of the city, have also use of the Fletcher Free Library, a choice collection of over seventeen thousand volumes, for loan and reference, which is open daily."

VIRGINIA.

The colleges of Virginia stand deservedly high for the scholarly attainments of their professors and the high standards of their literary and ethical courses. The University of Virginia may claim to have taken the lead in this country in according full recognition to the physical sciences, but the colleges of the State have been less favored than those of other States in respect to funds for the development of scientific departments.

The general failure of the colleges of Virginia to report the value of their scientific apparatus (see Table 49, Column 31) is calculated, however, to give an exaggerated idea of their deficiency in this respect.

The scientific equipment of the *University of Virginia* is very complete and valuable.

Since 1866 the following schools have been established: The School of Applied Mathematics, created first as an adjunct to the School of Mathematics, and subsequently as an independent school; the School of Analytical Industrial and Agricultural Chemistry; the School of Agriculture, Zoölogy, and Botany; the School of Practical Astronomy, in connection with the Leander McCormick Observatory; the School of Natural History and Geology, and the School of English Language and Literature.

The School of Agriculture, Zoölogy, and Botany has an endowment of one hundred thousand dollars derived from the liberality of Samuel Miller, Esq. The endowment of the School of Natural History and Geology, amounting to fifty thousand dollars, was the gift of Mr. W. W. Corcoran.

From this brief outline it will be seen that the university is well prepared to meet the requirements imposed by the advance in scientific knowledge and in the application of science to the industrial arts.

Emory and Henry College, Emory, reports that funds are being raised for the erection of a science hall, which will probably be completed during the present year. It will contain a laboratory, chemical and philosophical lecture rooms, and cabinet of minerals, and will greatly increase the facilities for science instruction. A gymnasium is also being erected in the college campus.

The gifts and bequests of Cyrus H. McCormick, Esq., to *Washington and Lee University*, amounting to forty thousand dollars, have been applied to the endowment of the "McCormick" professorship of natural philosophy.

The professorship of applied chemistry is established upon a fund of \$42,600, the bequest of Robert H. Bayley, Esq., of New Orleans, La., who died in 1872. The university has a fine museum of natural history and an excellent collection of scientific works in its library. Substantial additions have lately been made to the scientific apparatus.

Richmond College, Richmond, celebrated, September 22, 1887, the formal opening of the new museum and art hall, a memorial of James Thomas, Jr., the constant friend and benefactor of the college. Mr. Thomas's family have given ten thousand dollars to found "The Thomas Museum Lecture Endowment," the income of which is to be used annually in securing a course of lectures on subjects relating to science, to philosophy, or to art.

WEST VIRGINIA.

The University of West Virginia, Morgantown, includes a preparatory school, the usual courses of collegiate study, the classical and scientific, a military department, a law school, leading to the degree of bachelor of laws; a school of civil engineering. The current catalogue reports a school of engineering established by the board of regents June, 1887.

WISCONSIN.

Dr. Thomas Chowder Chamberlin entered upon the presidency of the *University of Wisconsin* at the beginning of the scholastic year 1887-88. Notwithstanding an advance in the entrance requirements the attendance exceeded that of 1886-87. The president's report presents comparative statistics of the attendance upon the different colleges and courses, as shown by the classification of students for 1886-87 and 1887-88 and for the first term of 1888-89, with the design of showing the intellectual tendencies of the university. From this analysis it appears that the humanity courses take precedence of the physical science course.

On the basis of unit exercises a week their relative position is as follows:

Studies.	Unit Exercises per Week.	Percentage Ratios.
Humanity.....	26,355½	57.95
Physical science.....	19,122½	42.05
Total.....	45,478	100.00

Among other indications of the growth and vigor of the university must be noted the establishment of new courses and departments.

Pre-medical course.—At the request of the Wisconsin State Medical Society a course in science, with collateral branches, is arranged especially for those contemplating the study of medicine and surgery.

Normal graduate course.—To bring the university into better working relationship with the State normal schools and to offer their graduates facilities for extending their studies advantageously, two special courses, admitting of a large measure of modification by election, have been framed and offered by the university, and have already been selected by a sufficient number of normal school graduates to indicate that the provision meets a real educational want.

Pre-legal and pre-journalistic courses.—A two years' course of study had previously been offered for the accommodation of those contemplating the study of law or journalism. This has been developed into a group of courses, intended to constitute the work of the Junior and Senior years and to be based upon the work of the Freshman and Sophomore years of the classical and English courses. The courses thus contemplate a higher and broader culture than before, and are intended to enable students to secure the chief objects sought in a college course while at the same time they are definitely preparing the way for their future professional study.

Additional languages.—Three additional languages have been offered, namely, Sanscrit, Italian, and Spanish, and classes have been formed in all.

New departments.—A chair of experimental and comparative psychology has been established, and a laboratory is being fitted up for this new and important line of research.

The gymnasium building of *Racine College, Racine*, an ample structure containing all necessary apparatus for healthful exercise, as well as a thoroughly furnished laboratory and art studio, was unfortunately destroyed by fire on the night of February 14, 1888.

The friends of the college immediately rallied for its relief, and funds are being rapidly supplied for the restoration of the building. The loss to the college, it is stated, could not be replaced by twenty thousand dollars, although the commercial value would not permit a greater than five thousand five hundred dollars insurance on the building and contents.

The prospect for a complete restoration of the building, with enlargements, is already so flattering that the trustees of the college have begun the work of securing material, and it is expected to have the new building in readiness for occupancy by the opening of the Christmas term.

TABLE 49.—Statistics of Colleges of

	Location.	Name.	President.	Date of Charter.	Year of First Opening.
	1	2	3	4	5
	ALABAMA.				
1	Birmingham.....	Howard College.....	Thos. J. Dill, LL. D., president <i>pro tem.</i>	1842	1842
2	Mobile.....	Spring Hill College.....	Rev. David McKintiry, S. J.....	1836	1830
3	Selma.....	Selma University.....	Rev. Charles L. Purce, A. B.	1881	1878
4	University.....	University of Alabama.....	Henry D. Clayton, LL. D.....	1820	1831
	ARKANSAS.				
5	Batesville.....	Arkansas College *.....	Rev. I. J. Long, D. D.....	1872	1872
6	Boonsborough.....	Cane Hill College.....	Rev. F. R. Earle, A. M., D. D.....	1852	1852
7	Little Rock.....	Little Rock University.....	Rev. Alfred Noon, A. M.....	1883	1882
8	Little Rock.....	Philander Smith College..	Rev. Thomas Mason, A. M.....	1883	1877
	CALIFORNIA.				
9	Benicia.....	College of St. Augustine...	Rt. Rev. J. H. D. Wingfield, D. D., LL. D.	1868	1867
10	Berkeley.....	University of California....	Horace Davis, A. B.....	1868	1869
11	College City.....	Pierce Christian College....	James C. Keith.....	1874	1874
12	Los Angeles.....	St. Vincent's College.....	Rev. A. J. Meyer, C. M.....	1869	1867
13	Los Angeles.....	University of Southern California.*	Rev. M. M. Bovard, A. M., D. D....	1880	1880
14	Napa City.....	Napa College.....	J. N. Beard, A. M.....	1885	1870
15	San Francisco.....	St. Ignatius College.....	Very Rev. H. Immoda, S. J.....	1859	1855
16	San José.....	University of the Pacific*..	Rev. A. C. Hirst, D. D.....	1852	1852
17	Santa Clara.....	Santa Clara College.....	Rev. R. E. Kenna, S. J.	1855	1851
18	Santa Rosa.....	Pacific Methodist College..	J. S. Austin, A. M.....	1862	1861
19	Woodbridge.....	San Joaquin College.....	Rev. Darius A. Mobley, A. M., D. D.	1883	1879
20	Woodland.....	Hesperian College.....	A. M. Elston, A. M.....	1869	1861
	COLORADO.				
21	Boulder.....	University of Colorado.....	Horace M. Hale, A. M.....	1861	1877
22	Colorado Springs..	Colorado College*.....	{William Strieby, acting presi- dent.	1874	1874
23	Del Norte.....	Presbyterian College of the South-west.	George M. Darley.....	1883	1884
24	Denver.....	University of Denver.....	Jos. C. Shattuck, PH. D., dean ...	1864	1880
	CONNECTICUT.				
25	Hartford.....	Trinity College.....	Rev. George W. Smith, D. D.....	1824	1826
26	Middletown.....	Wesleyan University.....	John M. Van Vleck, LL. D., acting president.	1831	1831
27	New Haven.....	Yale University.....	Rev. Timothy Dwight, D. D., LL. D.	1701	1701
	DAKOTA.				
28	East Pierre.....	Pierre University.....	Rev. W. M. Blackburn, D. D.....	1883	1883
29	Grand Forks.....	University of North Da- kota.	Romer B. Sprague, A. M., PH. D.	1883	1884
30	Vermillion.....	University of Dakota.....	Edward Olson.....	1862	1883
	DISTRICT OF CO- LUMBIA.				
31	Washington.....	Columbian University.....	James C. Welling, LL. D.....	1821	1821
32	Washington.....	Georgetown College*.....	Rev. James A. Doonan, S. J.....	1815	1789
33	Washington.....	Gonzaga College.....	Rev. Edward A. McGurk, S. J. ...	1858	1820
34	Washington.....	Howard University.....	Rev. William W. Patton, D. D., LL. D.	1867	1867
35	Washington.....	National Deaf-Mute Col- lege.	Edward M. Gallaudet, PH. D., LL. D.	1864	1864

* Statistics of 1886-87.

Liberal Arts for 1887-88.—PART I.

Religious Denomination.	Professors and Instructors.			Students.								Number of Degrees Conferred in Course in 187-88.	Number of Endowed Professors.	Number of Fellowships.	Number of Scholarships.	
	Number in Preparatory Department.	Number in Collegiate Department.	Total Number.	Number in Preparatory Department.		Number in Collegiate Department.		Number of Resident Graduates.		Total Number.						
				Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.				State.	Other.
6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Baptist.....	1	5	6	20	0	137	0	0	0	157	0	7	.....	.....	.....	1
R. C.....	2	14	16	14	0	91	0	0	0	105	0	12	.....	.....	.....	2
Baptist.....	.....	.....	8	.....	.....	9	3	.....	.....	157	225	.....	.....	.....	.....	3
Non-sect.....	0	13	13	0	0	216	0	1	0	217	0	35	0	0	0	4
Presb.....	.....	.....	4	.....	.....	.....	.....	.....	.....	56	40	7	1	0	0	5
Com. Pres.....	.....	4	4	.....	.....	(10)	.....	.....	.....	(10)	.....	0	0	.....	.....	6
M. E.....	.....	5	5	(110)	.....	(14)	.....	.....	.....	(172)	.....	4	.....	.....	.....	7
M. E.....	1	4	5	116	63	9	5	.....	.....	125	63	1	.....	.....	.....	8
P. E.....	.....	.....	6	35	0	30	0	.....	.....	65	0	.....	.....	.....	.....	9
Non-sect.....	.....	.....	100	.....	.....	244	50	7	4	251	51	36	2	.....	0	10
Christian.....	.....	.....	9	18	22	23	22	.....	.....	46	44	4	0	0	0	11
R. C.....	6	4	10	202	0	12	0	.....	.....	214	0	.....	.....	.....	.....	12
M. E.....	3	11	14	(127)	.....	(30)	.....	0	0	(157)	.....	.....	.....	.....	.....	13
M. E.....	.....	14	43	30	8	4	.....	.....	.....	51	34	0	0	0	0	14
R. C.....	7	12	19	480	0	250	0	0	0	730	0	7	.....	.....	.....	15
M. E.....	5	11	16	(235)	.....	(188)	.....	0	0	(423)	.....	26	.....	.....	.....	16
R. C.....	3	19	22	33	0	173	0	6	0	217	0	19	.....	.....	.....	17
M. E. So.....	.....	9	7	3	64	23	.....	.....	.....	71	31	10	0	0	0	18
U. B.....	6	3	9	33	23	14	12	1	3	43	33	4	.....	.....	.....	19
Christian.....	.....	.....	7	.....	.....	.....	.....	2	3	37	62	5	.....	.....	.....	20
Non-sect.....	.....	.....	8	41	30	15	16	2	0	53	66	4	0	0	0	21
Non-sect.....	.....	.....	7	26	11	(31)	.....	.....	.....	{ (31) }	.....	0	0	0	0	22
Presb.....	.....	.....	4	31	0	12	0	.....	.....	43	0	.....	.....	.....	.....	23
M. E.....	.....	.....	32	.....	.....	14	6	.....	.....	215	123	.....	.....	.....	.....	24
P. E.....	0	12	12	0	0	112	0	1	0	113	0	30	5	.....	.....	25
M. E.....	0	19	19	0	0	174	13	2	1	176	14	70	10	.....	50	26
Non-sect.....	0	44	44	0	0	614	0	60	0	633	0	134	13	3	.....	27
Presb.....	.....	.....	8	3	6	9	8	.....	.....	12	14	2	0	0	0	28
Non-sect.....	.....	.....	8	21	11	16	11	0	0	50	48	0	0	0	0	29
Non-sect.....	6	14	20	95	83	39	17	2	0	136	100	3	0	0	0	30
Non-sect.....	.....	.....	19	85	0	113	7	0	0	193	7	12	51	.....	.....	31
R. C.....	8	13	26	110	0	82	0	.....	.....	192	0	13	.....	.....	.....	32
R. C.....	2	5	7	39	0	65	0	0	0	95	0	0	0	0	0	33
Non-sect.....	6	7	14	46	0	23	1	.....	.....	253	59	9	.....	.....	.....	34
Non-sect.....	.....	.....	7	11	6	35	0	0	0	46	6	5	.....	.....	.....	35

a Includes instructors in professional schools.

b Partially.

TABLE 49.—Statistics of Colleges of

	Location.	Name.	President.	Date of Charter.	Year of First Opening.
	1	2	3	4	5
	FLORIDA.				
36	Winter Park.....	Rollins College.....	Rev. E. P. Hooker, D. D.....	1885	1885
	GEORGIA.				
37	Athens.....	University of Georgia.....	L. H. Charbonnier, A. M.....	1785	1801
38	Atlanta.....	Atlanta University.....	Rev. Horace Bumstead, D. D.....	1867	1869
39	Atlanta.....	Clark University.....	Rev. E. O. Thayer, A. M.....	1879	1869
40	Bowdon.....	Bowdon College.....	Rev. F. H. M. Henderson, D. D.....	1857	1856
41	Oxford.....	Emory College.....	Rev. W. A. Candler, D. D.....	1836	1837
	ILLINOIS.				
42	Abingdon.....	Hedding College.....	Rev. J. R. Jaques, A. M., D. D., PH. D.	1875	1855
43	Bloomington.....	Illinois Wesleyan University.	W. H. Wilder.....	1853	1853
44	Bourbonnais Grove	St. Viateur's College.....	Rev. M. J. Marsile, C. S. V.....	1874	1865
45	Carthage.....	Carthage College.....	Rev. E. F. Bartholomew, A. M.....	1870	1869
46	Chicago.....	St. Ignatius College.....	Rev. Edward A. Higgins, S. J.....	1870	1869
47	Eureka.....	Eureka College.....	Carl Johann, A. M.....	1855	1849
48	Evanston.....	North-western University..	Rev. Joseph Cummings, D. D., LL. D.	1851	1855
49	Ewing.....	Ewing College.....	Rev. John Washburn, A. M., D. D	1874	1867
50	Fulton.....	Northern Illinois College...	A. M. Hansen, A. M., PH. D.....	1867	.....
51	Galena.....	German-English College...	Rev. Fr. Schaub, A. M.....	1881	1868
52	Galesburg.....	Knox College.....	Hon. Newton Bateman, A. M., LL. D.	1837	1841
53	Galesburg.....	Lombard University.....	J. B. McMichael, D. D.....	1851	1852
54	Jacksonville.....	Illinois College.....	Edward A. Tanner, D. D.....	1835	1829
55	Lake Forest.....	Lake Forest University.....	Wm. C. Roberts, D. D., LL. D.....	1856	1876
56	Lebanon.....	McKendree College.....	Rev. I. Villars, D. D.....	1834	1823
57	Lincoln.....	Lincoln University.....	Albert McGinnis, senior professor.	1865	1865
58	Monmouth.....	Monmouth College.....	J. B. McMichael, D. D.....	1857	1856
59	Naperville.....	North-western College.....	Bishop Thomas Bowman.....	1865	1862
60	Quincy.....	Chaddock College.....	M. D. Hornbeck, A. M., S. T. B.....	1878	1878
61	Quincy.....	St. Francis Solanus College	Rev. P. Anselmus Mueller, O. S. F.	1873	1860
62	Rock Island.....	Augustana College.....	Rev. T. N. Hasselquist, D. D.....	1865	1860
63	Teutopolis.....	St. Joseph's Diocesan College.	Rev. P. Michael Richardt, O. S. F.	1881	1862
64	Upper Alton.....	Shurtleff College.....	Rev. A. A. Kendrick, B. D.....	1835	1827
65	Westfield.....	Westfield College.....	Rev. I. L. Kephart, D. D., F. S. SC.	1865	1865
66	Wheaton.....	Wheaton College.....	Charles A. Blanchard.....	1861	1855
	INDIANA.				
67	Bloomington.....	Indiana University.....	David S. Jordan, M. D., PH. D., LL. D.	1820	1824
68	Crawfordsville.....	Wabash College.....	Rev. Joseph F. Tuttle, D. D., LL. D.	1834	1833
69	Fort Wayne.....	Concordia College.....	Andrew Baepfer, director.....	1850	1839
70	Franklin.....	Franklin College.....	Rev. William T. Stott, D. D.....	1814	1837
71	Greencastle.....	De Pauw University.....	Rev. Alexander Martin, D. D., LL. D.	1837	1837
72	Hanover.....	Hanover College.....	Rev. D. W. Fisher, D. D., LL. D.....	1832	1823
73	Hartsville.....	Hartsville College.....	Rev. C. H. Kiracone, A. M.....	1851	1852
74	Irrington.....	Butler University.....	B. M. Blount, A. M.....	1830	1855
75	Merom.....	Union Christian College.....	Rev. L. J. Aldrich, A. M., B. D.....	1859	1861
76	Moore's Hill.....	Moore's Hill College.....	G. P. Jenkins, A. M., D. D.....	1854	1854
77	Notre Dame.....	University of Notre Dame	Very Rev. Thomas E. Walsh, C. S. C.	1844	1845
78	Richmond.....	Earlham College.....	Joseph J. Mills, A. M.....	1859	1859
79	Ridgeville.....	Ridgeville College.....	Rev. E. O. Dickinson, A. M.....	1867	1867
80	St. Meinrad.....	St. Meinrad's College.....	Rev. P. Bede Maler, O. S. B., librarian.	.....	1857

α Includes 110 students in music and 465 non-residents and post-graduates.

Liberal Arts for 1887-88.—PART I—Continued.

Religious Denomination.	Professors and Instructors.			Students.								Number of Degrees Conferred in Course in 1887-88.		Number of Endowed Professors.	Number of Fellowships.	Number of Scholarships.	
	Number in Preparatory Department.	Number in Collegiate Department.	Total Number.	Number in Preparatory Department.		Number in Collegiate Department.		Number of Resident Graduates.		Total Number.							
				Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.						
6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
Non-sect.....			10	32	5	0	2	0	0	(6s)		0	0	0	0	0	36
Non-sect.....			13			195	0			195	0	45	1				37
Non-sect.....			17	27	1	24	0	0	0	242	276	0	0	0		7	38
M. E.			22	(210)		6	0	0	0	205	175	3	0	0	0	0	39
Non-sect.....	2	2	4	19	8	27	30	2	7	111	52	6	0	0		0	40
M. E. So	2	9	11	67	0	174	0	0	0	241	0	33	3				41
M. E.	3	8	11	55	50	20	5	0	1	75	56	1					42
M. E.			19	(12s)		94	28			α(825)		55			0	0	43
R. C.			19	107	0	83	0	0	0	190	0						44
Lutheran....	3	4	7	33	20	20	10	6	1	59	31						45
R. C.	8	10	18	173	0	64	0	0	0	237	0	8					46
Christian....			10	70	10	51	49	1	0	122	59	17					47
M. E.	13	15	28	(434)		146	90	0	0	(760)		49	3			367	48
Baptist.....			4	35	12	35	11			70	23	3				6	49
Non-sect.....			8	44	11	29	11			73	22		0	0	0	0	50
M. E.			7	(42)		2	0	0	0	79	20	1	0	0	0	0	51
Non-sect.....	10	9	19	103	68	131	55			234	123	41					52
Univ.			13	34	30	25	24			60	57	6	3			15	53
Non-sect.....			10	101	0	69	0	0	0	170	0	15				8	54
Presb.	19	13	32	67	90	45	25	6	4	118	119	31	1			11	55
M. E.			6	(6s)		12	11	0	0	58	62	13	0	0	0	0	56
Cum. Presb.			4	39	28	24	10			63	38						57
Un. Presb. ..			14	82	53	84	56			196	109	45					58
Ev. Ass'n ..			10	119	65	53	20			172	85	1					59
M. E.			11	41	22	17	10			79	67	1					60
R. C.			12			69	0			154	0	4					61
Lutheran....			16	66	20	72	1	3	0	148	37	15					62
R. C.	2	9	11	26	0	139	0	10	0	175	0						63
Baptist.....	4	8	12	49	83	21	11			104	66	6	55			22	64
U. B.	1	7	8	56	30	30	19	0	0	101	69	1	1				65
Non-sect.....			12	(133)		(59)		0	0	(223)		9	53	0	0	2	66
Non-sect....	3	27	30	70	55	200	68	4	1	274	124	45	0	0	0	20	67
Presb.	2	10	12	98	0	139	0	5	0	242	0	21	5		23	38	68
Lutheran....			7			210	0	0	0	210	0	0					69
Baptist.....			10	67	57	43	36			110	113	16	1	0			70
M. E.	15	17	43	200	125	(231)		(10)		471	298	73	0	0			71
Presb.			11	40	20	60	18	0	2	100	40	14					72
U. B.	4	4	8	30	23	14	7			44	30	6	1			30	73
Christian ..	1	8	9	48	17	67	22	2	0	117	39	17	2		0	0	74
Christian ..	4	6	10							101	46	4					75
M. E.			6	23	21	41	19			64	40	6					76
R. C.	20	20	40	291	0	175	0			551	0	41	0	0	0	0	77
Friends			13	43	32	53	53			106	85	15	0	0	0	0	78
F. W. Bapt.			4	46	38	1				47	38					33	79
L. C.			8			55	0			71	0						80

b Partially.

TABLE 49.—Statistics of Colleges of

Location.	Name.	President.	Date of Charter.	Year of First Opening.
1	2	3	4	5
IOWA.				
81 College Springs.....	Amity College.....	Rev. T. J. Kennedy, D. D.....	1853	1857
82 Davenport.....	Griswold College.....	Rev. C. H. Seymour, S. T. D.....	1859	1859
83 Decorah.....	Norwegian Luther College.....	Rev. Laur. Larsen.....	1865	1861
84 Des Moines.....	Drake University.....	Geo. T. Carpenter, A. M., F. A. S. C.....	1881	1881
85 Des Moines.....	University of Des Moines.....	Rev. J. P. Stephenson, A. M.....	1865	1865
86 Dubuque.....	St. Joseph's College *.....	Very Rev. R. Ryan.....	1873	1873
87 Fairfield.....	Parson's College.....	Rev. T. D. Ewing, D. D.....	1875	1875
88 Fayette.....	Upper Iowa University.....	Rev. J. W. Bissell, A. M., D. D.....	1860	1857
89 Grinnell.....	Iowa College.....	George A. Gates.....	1847	1848
90 Hopkinton.....	Lenox College.....	J. A. Ritchey, Ph. D.....	1856	1859
91 Indianola.....	Simpson College.....	Rev. William E. Hamilton, A. M.....	1867	1867
92 Iowa City.....	State University of Iowa.....	Charles A. Schaeffer, A. M., Ph. D.....	1847	1860
93 Mt. Pleasant.....	German College.....	Rev. John Schlegelhauf, A. M.....	1873	1873
94 Mt. Vernon.....	Cornell College.....	Rev. Wm. F. King, D. D., LL. D.....	1857	1853
95 Oskaloosa.....	Oskaloosa College.....	J. A. Beattie, M. S.....	1861	1862
96 Oskaloosa.....	Penn College.....	Benjamin Trueblood, LL. D.....	1873	1873
97 Pella.....	Central University of Iowa.....	Rev. L. A. Dunn, D. D.....	1853	1853
98 Tabor.....	Tabor College.....	Rev. William M. Brooks, A. M.....	1866	1857
99 Toledo.....	Western College.....	Rev. W. M. Beardshear, A. M., D. D.....	1855	1856
KANSAS.				
100 Atchison.....	St. Benedict's College.....	Rt. Rev. Innocent Wolf, O. S. B.....	1859	1859
101 Baldwin.....	Baker University.....	Rev. Hillary A. Gobin, A. M., D. D.....	1858	1858
102 Emporia.....	College of Emporia.....	Rev. John F. Hendy, D. D.....	1882	1883
103 Highland.....	Highland University.....	Rev. Duncan Brown, D. D.....	1858	1858
104 Holton.....	Campbell University.....	E. J. Hoenshel.....	1881	1882
105 Lawrence.....	University of Kansas.....	Joshua A. Lippincott, D. D., LL. D.....	1861	1866
106 Lecompton.....	Lane University *.....	J. A. Weller, A. M.....	1862	1862
107 Ottawa.....	Ottawa University.....	M. L. Ward, A. M.....	1860	1865
108 St. Mary's.....	St. Mary's College.....	Rev. Henry J. Votel, S. J.....	1869	1870
109 Salina.....	Kansas Wesleyan University.....	Rev. Aaron Schuyler, A. M., LL. D.....	1835	1886
110 Sterling.....	Cooper Memorial College.....	A. N. Porter, A. B., acting president.....	1886	1887
111 Topeka.....	Washburn College.....	Peter McVicar, A. M., D. D.....	1865	1865
112 Wichita.....	Garfield University.....	H. W. Everest, A. M., LL. D., chancellor.....	1858	1887
KENTUCKY.				
113 Berea.....	Berea College.....	Rev. E. H. Fairchild.....	1865	1858
114 Bowling Green.....	Ogden College.....	Wm. A. Obenchain, A. M.....	1877	1877
115 Danville.....	Centre College.....	Ormond Beatty, LL. D.....	1824	1821
116 Eminence.....	Eminence College.....	W. S. Giltner, M. A.....	1856	1857
117 Georgetown.....	Georgetown College.....	Rev. R. M. Dudley, D. D.....	1829	1830
118 Hopkinsville.....	South Kentucky College.....	James E. Scobey, A. M.....	1849	1881
119 Lexington.....	Kentucky University.....	Charles Louis Loos.....	1858	1859
120 Millersburg.....	Kentucky Wesleyan College.....	D. W. Batson, A. M.....	1860	1866
121 Murray.....	Murray Male and Female Institute and West Kentucky Normal School.....	G. A. Burr.....	1869	1871
122 North Middletown.....	Kentucky Classical and Business College.....	S. W. Pearcy, A. M.....	1878	1877
123 Richmond.....	Central University.....	L. H. Blanton, D. D., chancellor.....	1873	1874
124 Russellville.....	Bethel College.....	Rev. W. S. Ryland, A. M., Ph. D.....	1850	1854
125 St. Mary's.....	St. Mary's College.....	Rev. David Fennessy, C. E.....	1837	1821
LOUISIANA.				
126 Baton Rouge.....	Louisiana State University and Agricultural and Mechanical College.....	Col. J. W. Nicholson, acting president.....	1877	1877

* Statistics of 1886-87.

Liberal Arts for 1837-38.—PART I—Continued.

Religious Denomination.	Professors and Instructors.			Students.								Number of Degrees Conferred in Course in 1887-'88.	Pro- fessors.	Number of Fellowships.	Number of Scholar- ships.		
	Number in Prepara- tory Department.	Number in Colle- giate Department.	Total Number.	Number in Pre- paratory Depart- ment.		Number in Collegiate Department.		Number of Resident Graduates.		Total Number.					State.	Other.	
				Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.						
6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
Non-sect.....			10	85	62	32	23			117	85	5				81	
P. E.....	15	8	23	36	100	29	10	2	0	69	110	5	2			1	82
Lutheran.....			7	75	0	43	0			118	0	14					83
Christian.....			30	49	89	35	26			137	186	3	0	0	0	0	84
Baptist.....			8	33	24	7	5			40	29	3				1	85
R. C.....	2	7	9	21	0	52	0	0	0	73	0	0	0	0	0	0	86
Presb.....			9	55	39	62	29	0	0	117	68	5	1	0	0	10	87
M. E.....	6	10	16	173	98	47	17	1	3	221	118	5	2			1	88
Cong.....			15	98	67	114	102			212	169	14	6	0	0	35	89
Presb.....			6	29	27	44	54			73	81	14	0	0	0	1	90
M. E.....	4	8	12	54	27	50	33			104	60	15	2				91
Non-sect.....	0	23	23	0	0	168	81	6	5	174	86	33	0	0	0	0	92
M. E.....	3	2	5	62	20	11	2	0	0	73	22	0					93
M. E.....	13	10	23	152	120	104	45	0	2	307	229	52	4	0	0	100	94
Christian.....			9	51	64	7	12	1	1	59	77	2					95
Friends.....	1	6	7	36	33	34	35			70	73	12					96
Baptist.....	3	6	9	55	51	12	11			67	62	7					97
Cong.....	2	9	17	67	71	24	28			103	130						98
U. B.....	4	9	13	60	51	45	23			105	74	19	2			4	99
R. C.....	5	14	19	21	0	102	0	0	0	123	0	5					100
M. E.....			13	126	87	76	33			202	125	10					101
Presb.....			8	20	23	10	6			30	29						102
Presb.....			11	35	33	9	9			44	47	2	1	0	0	0	103
Non-sect.....			13	110	90	9	11			116	101					0	104
Non-sect.....			26	119	62	119	50	8	5	237	117	35	0	0	0	0	105
U. B.....			8	120	85					120	85	1					106
Baptist.....			8	94	55	16	6			110	41	2					107
R. C.....	1	15	16	30	0	246	0	3	0	279	0	6	0	0	0	0	108
M. E.....	2	7	9	78	46	3	2			81	48						109
United P.....	1	8	4	17	14					17	14						110
Cong.....			14	107	90	32	12	3	1	142	103	3					111
Christian.....			9	70	41	23	16	0	0	544	191	4	0	0	0	0	112
Non-sect.....			18	201	150	15	11			216	161	2					113
Non-sect.....			4	40	0	33	0	0	0	78	0	6	1	0	0	0	114
Presb.....	2	7	9	15	30	40	60			195	0	20	1	0	0	20	115
Christian.....			10	15	30	40	60			55	90	5					116
Baptist.....	2	6	8	21	0	121	0			142	0	12					117
Christian.....	1	8	9	10	12	41	51	1	1	52	64	2	0	0	0	0	118
Christian.....	2	7	9	46	0	113	0	0	0	159	0	12	1	0	0	0	119
M. E. So.....			4							117	0	9					120
Non-sect.....	2	2	4	25	35	20	30	35	40	80	105	0	0	0	0		121
Christian.....	2	9	11	17	13	33	44			50	57	3					122
Presb.....			11	60	0	110	0	3	0	175	0	17	3			30	123
Baptist.....	1	5	6	34	0	128	0	0	0	162	0	5	3				124
R. C.....		10	10			60	0			60	0	4	0	0	0	0	125
Non-sect.....	0	11	11	0	0	83	0	0	0	83	0	7	0	0	0	0	126

TABLE 49.—Statistics of Colleges of

Location.	Name.	President.	Date of Charter.	Year of First Opening.
1	2	3	4	5
LOUISIANA—cont'd.				
127 Grand Coteau.....	St. Charles College.....	Rev. John Montillot, s. J.....	1852	1837
128 Jackson.....	Centenary College of Louisiana.	Rev. W. L. C. Hunnicutt, D. D.....	1839	1839
129 Keachie.....	Keachie College.....	C. P. Fountain	1856	1856
130 New Orleans.....	College of the Immaculate Conception.	Very Rev. Theobald W. Butler, s. J.	1856	1847
131 New Orleans.....	Leland University.....	Rev. Edward C. Mitchell, D. D....	1870	1870
132 New Orleans.....	New Orleans University....	Rev. L. G. Adkinson, A. M., D. D..	1873	1865
133 New Orleans.....	Southern University.....	H. A. Hill	1880	1883
134 New Orleans.....	Straight University.....	Rev. R. C. Hitchcock.....	1869	1870
135 New Orleans.....	Tulane University of Louisiana.	Wm. Preston Johnston, LL. D. ...	1834	1834
136 Shreveport.....	Thatcher Institute.....	Captain George E. Thatcher, M. A.	1886	1871
MAINE.				
137 Brunswick.....	Bowdoin College.....	Rev. William DeWitt Hyde, D. D.	1794	1802
138 Lewiston.....	Bates College.....	Rev. Oren B. Cheney, D. D.....	1863	1863
139 Waterville.....	Colby University.....	Rev. Geo. D. B. Pepper, D. D., LL. D.	1820	1818
MARYLAND.				
140 Annapolis.....	St. John's College.....	Thomas Fell, A. M.....	1784	1789
141 Baltimore.....	Baltimore City College *	William Elliott, Jr.....	1839	1839
142 Baltimore.....	Johns Hopkins University	Daniel C. Gilman, A. M., LL. D. ...	1867	1876
143 Baltimore.....	Loyola College.....	Rev. F. A. Smith, s. J.....	1853	1841
144 Ellicott City.....	Rock Hill College.....	Brother Attale.....	1865	1857
145 Ellicott City.....	St. Charles's College.....	Rev. F. L. M. Dumont, s. s., A. M. ...	1830	1848
146 Emmitsburg.....	Mt. St. Mary's College.....	Rev. Edward P. Allen, A. M.....	1830	1808
147 New Windsor.....	New Windsor College and Windsor Female College.	Rev. A. M. Jelly, D. D.....	1866	1840
148 Westminster.....	Western Maryland College.	Rev. T. H. Lewis, A. M., D. D.....	1868	1867
MASSACHUSETTS.				
149 Amherst.....	Amherst College.....	Rev. Julius H. Seelye, D. D., LL. D..	1825	1821
150 Boston.....	Boston College.....	Robert Fulton, s. J.....	1863	1864
151 Boston.....	Boston University.....	William F. Warren, S. T. D., LL. D.	1869	1873
152 Cambridge.....	Harvard University.....	Charles W. Eliot, LL. D.....	1650	1638
153 College Hill.....	Tufts College.....	Rev. Elmer H. Capen, D. D.....	1852	1855
154 Williamstown.....	Williams College.....	Franklin Carter, P. H. D., LL. D....	1793	1793
155 Worcester.....	College of the Holy Cross..	Rev. Samuel Cahill, s. J.....	1865	1843
MICHIGAN.				
156 Adrian.....	Adrian College.....	G. B. McElroy, D. D., PH. D., chairman of faculty.	1859	1859
157 Albion.....	Albion College.....	Rev. L. R. Fiske, D. D., LL. D.....	1861	1861
158 Ann Arbor.....	University of Michigan.....	James B. Angell, LL. D.....	1837	1841
159 Battle Creek.....	Battle Creek College.....	W. W. Prescott, A. M.....	1874	1874
160 Benzonia.....	Grand Traverse College *	S. B. Harvey.....	1863	1863
161 Detroit.....	Detroit College.....	Rev. John P. Frieden, s. J.....	1881	1877
162 Hillsdale.....	Hillsdale College.....	Hon. George F. Mosher, A. M.....	1835	1855
163 Holland.....	Hope College.....	Rev. Charles Scott, D. D.....	1866	1866
164 Kalamazoo.....	Kalamazoo College.....	Rev. Monson A. Wilcox, D. D.....	1833	1833
165 Olivet.....	Olivet College.....	Rev. Horatio Q. Butterfield, D. D.	1859	1859
MINNESOTA.				
166 Collegeville.....	St. John's University.....	Alexius Edelbrock, o. s. B.....	1857	1857
167 Hamline.....	Hamline University.....	Rev. Geo. H. Bridgman, D. D.....	1854	1854
168 Macalester.....	Macalester College.....	Rev. T. A. McCurdy, D. D.....	1858	1884

* Statistics of 1886-87.

Liberal Arts for 1887-88.—PART I—Continued.

Religious Denomination.	Professors and Instructors.			Students.								Total Number.		Number of Degrees Conferred in Course in 1887-88.	Number of Endowed Professorships.		Number of Fellowships.		Number of Scholarships.	
	Number in Preparatory Department.	Number in Collegiate Department.	Total Number.	Number in Preparatory Department.		Number in Collegiate Department.		Number of Resident Graduates.												
				Male.	Female.	Male.	Female.	Male.	Female.											
6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				
R. C.	1	11	12	18	0	59	0	2	0	89	0	11	0	0	0	0	127			
M. E. So.			6							100							128			
Baptist.			6	32	42	32	31			64	73	0	0	0	0	0	129			
R. C.			15							143		5					130			
Baptist.	3	6	9							144	71	1					131			
M. E.	3	3	13	3	4	7	1	0	0	(218)		2					132			
Non-sect.			10							167	233	0	0	0	0	0	133			
Non-sect.			19	197	215	8	9	1	0	206	224	3	0	0	0	0	134			
Non-sect.			40	245		85	59			a 331	150	6				89	135			
Non-sect.			6							165	0						136			
Cong.	0	14	14	0	0	176	0	0	0	176	0	43	6			53	137			
F. Baptist.	0	10	10	0	0	103	34	0	0	103	34	41	1			35	138			
Baptist.	0	12	12	0	0	99	20	0	0	99	20	38	2	0	0	70	139			
Non-sect.	4	6	10	69	0	67	0	2	0	138	0	20	0	0	26	16	140			
Non-sect.			14							356	0						141			
Non-sect.	0	57	57	0	0	189	0	231	0	420	0	61	0	20		60	142			
R. C.	2	6	8	43	0	67	0	0	0	110	0					7	143			
R. C.			14	100	0	22	0	0	0	122	0	2					144			
R. C.	4	12	16	95	0	134	0	0	0	229	0	0			0		145			
R. C.			20	86	0	61	0	10	0	157	0	10	0	0	0	0	146			
Presb.			12	22	26	20	25			42	51	6					147			
Meth. Prot.			14	52	17	51	52			103	69	5			25	13	148			
Cong.	0	23	28	0	0	348	0	2	0	350	0	127	9	1	3	193	149			
R. C.			13			100	0			292	0	16	0	0	0	0	150			
M. E.	0	18	18	0	0	(194)		(13)		(207)	0	47	1			77	151			
Non-sect.	0	85	85	0	0	1,138	0			1,138	0	237	13	17		120	152			
Univ.	0	17	17	0	0	92	0	13	0	105	0	53	3			29	153			
Non-sect.	0	23	23	0	0	232	0	1	0	233	0	51	8		3	20	154			
R. C.			21	8	0	125	0			213	0	24					155			
Meth. Prot.			13							95	50	19					156			
M. E.	4	8	12	114	68	55	39	0	1	169	108	13	5	0	0	0	157			
Non-sect.	0	50	50	0	0	541	188	17	6	558	194	130	0	0	0	0	158			
7 Day Ad.			16							223	165		0	0	0	0	159			
Cong.			5							21	24						160			
R. C.	10	6	16	203	0	60	0	0	0	263	0	13	0	0	0	0	161			
F. Bapt.			20	(138)		(150)				(398)	18	3				2,000	162			
Reformed.	3	7	10	89	17	36	1			125	18	13	0	0	0	1	163			
Baptist.			10	61	37	26	18			87	55	5	2	0	0	0	164			
Cong. and Presb.			16	55	23	60	42	0	0	133	117	19	8	0	0	0	165			
R. C.	3	15	18	42	0	151	0	0	0	193	0	23	0	0	0	0	166			
M. E.			11	80	76	24	26			115	126	9	4				167			
Presb.			8	58	3	25	0			83	3	0	3			3	168			

a Does not include 731 students in Free Drawing School.

TABLE 49.—Statistics of Colleges of

Location.	Name.	President.	Date of Charter.	Year of First Opening.
1	2	3	4	5
MINNESOTA—continued.				
169 Minneapolis	Augsburg Seminary	Rev. Georg Sverdrup	1869	1869
170 Minneapolis	University of Minnesota.....	Cyrus Northrop, LL. D.	1868	1869
171 Northfield	Carleton College	Rev. James W. Strong, D. D.	1866	1867
MISSISSIPPI.				
172 Clinton.....	Mississippi College	Rev. W. S. Webb, D. D.	1850	1850
173 Holly Springs.....	Rust University.....	Rev. Chas. E. Libby, PH. B.	1869	1869
174 Holmesville.....	Kavanaugh College.....	Rev. H. Walter Featherstun.....	1885	1884
175 University	University of Mississippi ..	Edward Mayes, LL. D., F. S. SC., chairman of the faculty.	1844	1848
MISSOURI.				
176 Bolivar.....	South-west Baptist College.	Julius M. Leavitt, A. M., PH. D. ...	1879	1878
177 Bowling Green	Pike County College	Ernest W. Dow.....	1887	1881
178 Canton	Christian University	Thomas F. Campbell.....	1852	1857
179 Cape Girardeau.....	St. Vincent's College	Rev. P. V. Byrne, C. M.	1843	1842
180 Columbia	University of the State of Missouri.	S. S. Laws, A. M., M. D., LL. D.	1839	1840
181 Edinburg.....	Grand River College	Rev. J. T. Williams, A. M., D. D. ...	1876	1845
182 Fayette	Central College	O. H. P. Corprew, A. M., chair- man of the faculty.	1855	1857
183 Fulton	Westminster College	Rev. William H. Marquess.....	1853	1853
184 Glasgow	Lewis College *	Rev. M. L. Curl, D. D.	1867	1867
185 Glasgow	Pritchett School Institute..	J. S. Kendall.....	1868	1866
186 La Grange	La Grange College.....	J. F. Cook, A. M., LL. D. ...	1859	1866
187 Liberty.....	William Jewell College.....	James G. Clark, LL. D., chair- man of the faculty.	1849	1850
188 Morrisville.....	Morrisville College	Rev. J. B. Ellis	1872	1872
189 St. Louis.....	College of the Christian Brothers.	Rev. Brother Paulian	1855	1851
190 St. Louis.....	St. Louis University	Rev. Henry Moeller, s. J.	1832	1829
191 St. Louis.....	Washington University	M. S. Snow, acting chancellor..	1853	1854
192 Springfield.....	Drury College.....	Francis T. Ingalls.....	1873	1873
193 Tarkio	Tarkio College.....	Rev. J. A. Thompson, A. M.	1885	1883
194 Warrenton.....	Central Wesleyan College..	Rev. Herman A. Koch, D. D.	1864	1864
MONTANA.				
195 Deer Lodge	College of Montana.....	Rev. D. J. McMillan, D. D.	1884	1883
NEBRASKA.				
196 Central City.....	Nebraska Central College..	Rev. H. A. Crane, A. M.	1885	1885
197 Crete	Doane College.....	Rev. David B. Perry, A. M.	1872	1872
198 Lincoln.....	University of Nebraska.....	Irving J. Manatt, PH. D., LL. D., chancellor.	1869	1871
199 Neligh	Gates College.....	D. J. Baldwin, secretary	1881	1882
200 Omaha	Creighton College.....	Rev. M. P. Dowling, s. J.	1879	1879
NEVADA.				
201 Reno	State University of Nevada.	Le Roy D. Brown, A. M., PH. D. ...	1864	1874
NEW HAMPSHIRE.				
202 Hanover	Dartmouth College.....	Rev. Samuel C. Bartlett, D. D., LL. D.	1769	1770

* Statistics of 1886-87.

Liberal Arts for 1887-88.—PART I—Continued.

Religious Denomination.	Professors and Instructors.			Students.								Number of Degrees Conferred in Course in 1887-88.	Number of Endowed Professorships.	Number of Fellowships.	Number of Scholarships.	
	Number in Preparatory Department.	Number in Collegiate Department.	Total Number.	Number in Preparatory Department.		Number in Collegiate Department.		Number of Resident Graduates.		Total Number.						
				Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.					
6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Lutheran.....			4	46	0	52	0			98	0	7	0	0	0	169
Non-sect.....			26			244	91	18	4	315	97	38	0	0	0	170
Cong.....	2	12	19	95	101	31	36	0	1	128	133	15				171
Baptist.....	2	5	7	130	0	100	0	0	0	230	0	7	0	0	0	172
M. E.....			9	161	182	2	0	0	0	163	182	2				173
M. E.....	1	7	8	10	20	40	60	0	0	50	80	6				174
Non-sect.....			14	35	0	156	6	9	0	200	6	14	0	0		175
Baptist.....			8							90	51	6				176
Non-sect.....			6	29	44	7	13			39	61					177
Christian.....	2	6	8							77	52	7	0	0	0	178
R. C.....	3	7	10	24	0	65	0	0	0	89	0	1	0	0		179
Non-sect.....			13			420	100	(4)		504	119	47	0	0	0	180
Baptist.....	1	4	5							39	55					181
M. E. So.....	2	6	8	100	0	44	0	1	4	145	4	6	3	1	0	182
Presb.....			9	40	0	70	0	0	0	110	0	6	6			183
M. E.....			8			71	19	2	5	73	24	1			10	184
Non-sect.....			7	20	18	29	23	0	2	49	48	5	2	0	0	185
Baptist.....			8							60	51					186
Baptist.....			8	134	0	72	0	0	0	206	0	9				187
M. E. So.....			7	9	7	11	4	2	1	94	50	3				188
R. C.....	9	10	25	190	0	61	0	1	0	354	0	16	0	0	0	189
R. C.....	1	12	13	40	0	275	0		0	315	0	8				190
Non-sect.....			26			95	7			95	7	19				191
Cong.....	2	9	11	85	59	17	6	0	0	103	65	6	2			192
United Pr.....			6	10	11	13	4	0	0	53	33					193
M. E.....	3	3	11	86	40	94	9	2	2	182	51	6	1	1		194
Presb.....			13	42	13	16	14			65	64					195
Non-sect.....	1	6	7	18	13	57	40	0	0	75	53	0			100	196
Cong.....			12	60	35	27	11			87	46	4	3	0	0	197
Non-sect.....			26	90	50	117	67	5	6	232	180	21				198
Cong.....	2	4	6	29	33	5	2	0	0	34	35	0	0	0	0	199
R. C.....	6	4	10	168	0	23	0	0	0	191	0	0	0	0	0	200
Non-sect.....			4			4				39	37		4			201
Cong.....	0	20	20	0	0	229	0			229	0	70	11			202

a One of these is but partially endowed.

TABLE 49.—Statistics of Colleges of

	Location.	Name.	President.	Date of Charter.	Year of First Opening.
	1	2	3	4	5
	NEW JERSEY.				
203	Newark	St. Benedict's College.....	Rev. Hugo Paff, O. S. B., PH. D.....	1831	1868
204	New Brunswick	Rutgers College	Merrill Edward Gates, LL. D., L. H. D.	1770	1770
205	Princeton	College of New Jersey	Rev. Francis L. Patton, D. D., LL. D.	1746	1746
206	Vineland.....	College of the Sacred Heart	Rev. Eugene H. Porcile, S. P. M.	1837	1835
	NEW MEXICO.				
207	Santa Fé	University of New Mexico..	Rev. E. Lyman Hood, A. M., acting president.	1831	1881
	NEW YORK.				
208	Allegany.....	St. Bonaventure's College..	Fr. Joseph Butler, O. S. F.....	1875	1859
209	Annandale	St. Stephen's College.....	Rev. Robert B. Fairbairn, D. D., LL. D.	1860	1858
210	Brooklyn	Brooklyn Collegiate and Polytechnic Institute.	David H. Cochran, PH. D., LL. D	1854	1855
211	Brooklyn	St. Francis College.....	Brother Jerome, O. S. F	1884	1859
212	Buffalo.....	Canisius College.....	Rev. Theodore Van Rossum, S. J.	1833	1870
213	Canton.....	St. Lawrence University.....	Rev. Absalom Graves Gaines, D. D.	1856	1858
214	Clinton.....	Hamilton College *.....	Rev. Henry Darling, D. D., LL. D.	1812	1812
215	Geneva	Hobart College	Eliphalet Nott Potter, S. T. D., LL. D.	1825	1825
216	Hamilton	Madison University	Rev. Ebenezer Dodge, D. D., LL. D.	1846	1820
217	New York	College of the City of New York.	Alexander S. Webb, LL. D	1847	1848
218	New York	Columbia College.....	Henry Drisler, LL. D., acting president.	1754	1754
219	New York	Manhattan College	Brother Justin	1863	1853
220	New York	University of the City of New York.	Rev. Henry M. MacCracken, D. D., LL. D.	1831	1832
221	Niagara University	Niagara University.....	Rev. Michael J. Kircher, C. M., secretary.	1883	1856
222	Rochester.....	University of Rochester	Martin B. Anderson, LL. D., L. H. D.	1850	1850
223	Schenectady	Union College ..	H. E. Webster ..	1795	1795
224	Syracuse.....	Syracuse University.....	Rev. Chas. N. Sims, D. D., LL. D., chancellor.	1870	1871
	NORTH CAROLINA.				
225	Chapel Hill.....	University of North Caro- lina.	Hon. Kemp P. Battle, LL. D.....	1739	1795
226	Charlotte	Biddle University	Rev. W. F. Johnson, D. D.....	1877	1867
227	Davidson College...	Davidson College.....	Rev. Luther McKinnon, D. D.....	1837	1837
228	Mt. Pleasant	North Carolina College.....	Rev. J. George Schaid, A. M.....	1859	1859
229	Raleigh	Shaw University.....	Rev. H. M. Tupper, D. D.....	1875	1865
230	Rutherford	Rutherford College.....	Rev. Robert L. Abernethy, A. M., D. D.	1871	1871
231	Salisbury	Livingston College	Rev. J. C. Price, D. D.....	1879	1879
232	Trinity College.....	Trinity College	John Franklin Crowell, A. B.....	1852	1852
233	Wake Forest.....	Wake Forest College.....	Charles E. Taylor, D. D., B. LIT....	1834	1834
234	Weaverville	Weaverville College.....	S. R. Trawick, A. M.....	1870	1871
	OHIO.				
235	Akron.....	Buchtel College.....	Rev. O. Cone, D. D.....	1870	1872
236	Ashland	Ashland College *	David Bailey	1878	1879
237	Athens	Ohio University.....	Charles W. Super, A. M., PH. D....	1804	1809

* Statistics of 1886-87.

Liberal Arts for 1887-88.—PART I—Continued.

Religious Denomination.	Professors and Instructors.			Students.								Number of Degrees Conferred in Course in 1887-88.	Number of Endowed Professors.	Number of Fellowships.	Number of Scholarships.	
	Number in Preparatory Department.	Number in Collegiate Department.	Total Number.	Number in Preparatory Department.		Number in Collegiate Department.		Number of Resident Graduates.		Total Number.					State.	Other.
				Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.					
6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
R. C.....	1	8	9	25	0	71	0	0	0	96	0	4	0	0	0	12
Reformed..	0	19	19	0	0	149	0	6	0	155	0	29	.....	.....	40	10
Non-sect ...	0	42	42	0	0	523	0	80	0	603	0	186	10	11	.....	77
R. C.....	.....	.....	12	30	0	41	0	.....	.....	94	0	8	.....	.....	.....	.....
Cong.....	5	5	10	30	30	75	50	0	0	105	80	0	0	0	0	10
R. C.....	7	6	*13	25	0	80	0	.....	.....	105	0	1	0	0	0	0
P. E.....	.....	.....	7	23	0	58	0	0	0	81	0	15	0	0	0	45
Non-sect ...	26	15	41	591	0	153	0	4	0	788	0	.....	0	0	0	0
R. C.....	.....	.....	15	130	0	85	0	.....	.....	295	0	5	0	0	0	210
R. C.....	16	9	25	138	0	40	0	0	0	334	0	3	0	0	0	10
Univ.....	0	7	7	0	0	50	16	0	0	50	16	15	5	.....	.....	32
Presb.....	0	13	13	0	0	173	0	1	0	174	0	45	10	.....	.....	25
P. E.....	0	9	9	0	0	65	0	0	0	65	0	18	1	0	6	3
Baptist....	6	14	20	116	0	122	0	.....	.....	233	0	31	1	0	0	45
Non-sect ...	12	27	39	383	0	459	0	.....	.....	842	0	58	.....	.....	.....	.....
Non-sect ...	0	49	49	0	0	233	0	20	0	253	0	79	1	.....	.....	18
R. C.....	9	10	19	150	0	120	0	1	0	271	0	23	0	0	0	0
Non-sect ...	0	20	20	0	0	124	0	31	0	166	0	41	.....	.....	.....	219
R. C.....	.....	.....	14	78	0	55	0	0	0	133	0	8	0	0	0	4
Non-sect ...	0	12	12	0	0	171	0	1	0	172	0	29	5	2	0	29
Non-sect ...	0	16	16	0	0	94	0	0	0	94	0	33	.....	.....	.....	47
M. E.....	.....	.....	19	11	27	169	179	.....	.....	180	206	86	2	.....	.....	17
Non-sect	0	15	*15	0	0	173	0	4	0	177	0	21	0	0	.....	6
Presb.....	6	6	12	121	0	46	0	0	0	167	0	4	.....	.....	.....	226
Presb.....	1	7	8	1	0	88	0	.....	.....	89	0	20	.....	.....	.....	227
Lutheran....	.....	.....	5	37	0	18	0	.....	.....	55	0	5	0	.....	.....	223
Baptist.....	.....	.....	16	6	13	47	7	0	0	135	145	4	.....	.....	.....	229
Non-sect	3	3	6	25	10	150	50	0	0	175	60	3	0	0	0	4
A. M. E.	4	6	11	81	53	21	3	(5)	.....	107	100	10	.....	.....	.....	231
Zion.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
M. E. So	.....	.....	8	18	0	103	0	.....	.....	155	0	.....	1	0	0	0
Baptist.....	.....	10	10	.....	.....	214	.....	.....	.....	214	.....	20	.....	.....	.....	233
M. E. So	.....	.....	3	40	43	16	9	0	0	56	52	2	0	0	0	0
Univ.....	6	8	14	70	63	38	36	.....	.....	108	99	20	8	.....	.....	50
Brethren ..	.....	.....	4	.....	.....	.....	.....	2	0	34	13	.....	.....	.....	.....	235
Non-sect ...	5	8	13	61	28	43	14	1	2	108	48	18	0	0	88	0

TABLE 49.—Statistics of Colleges of

Location.	Name.	President.	Date of Charter.	Year of First Opening.
1	2	3	4	5
OHIO—continued.				
238 Berea	Baldwin University	J. E. Stubbs	1856	1856
239 Berea	German Wallace College	Rev. William Nast, D. D.	1864	1864
240 Brooklyn Village	Calvin College	Rev. H. J. Ruetenik, D. D.	1883	1873
241 Cincinnati	St. Joseph's College	Rev. Jas. Rogers, C. S. C.	1873	1871
242 Cincinnati	St. Xavier College	Rev. Henry A. Schapman, S. J. ..	1869	1831
243 Cincinnati	University of Cincinnati	Jacob D. Cox, A. M., LL. D.	1870	1873
244 Cleveland	Adelbert College of West- ern Reserve University	Rev. Hiram C. Haydn, D. D., LL. D.	1826	1826
245 College Hill	Belmont College	P. V. N. Myers, A. M.	1846	1846
246 Columbus	Capital University	Rev. M. Loy, D. D.	1850	1853
247 Columbus	Ohio State University	William H. Scott, LL. D.	1870	1873
248 Delaware	Ohio Wesleyan University	Rev. Charles H. Payne, D. D., LL. D.	1844	1844
249 Findlay	Findlay College	J. R. H. Tatchaw	1882	1886
250 Gambier	Kenyon College	Rev. Wm. B. Bodine, D. D.	1824	1825
251 Germantown	Twin Valley College	Orvon Graff Brown, A. M.	1887	1886
252 Granville	Denison University	Rev. Galusha Anderson, D. D., LL. D.	1832	1831
253 Hiram	Hiram College	Colman Bancroft, M. S.	1867	1867
254 Marietta	Marietta College	Hon. John Eaton, PH. D., LL. D. ..	1835	1835
255 Mt. Union	Mt. Union College	G. W. Clarke, A. M., acting presi- dent.	1858	1846
256 New Concord	Muskingum College	Rev. John D. Irons	1837	1837
257 Oberlin	Oberlin College	Rev. James H. Fairchild, D. D.	1833	1833
258 Oxford	Miami University	R. W. McFarland, A. M., LL. D.	1809	1816
259 Rio Grande	Rio Grande College	John M. Davis	1875	1876
260 Scio	Scio College	Rev. G. B. Smith, PH. D.	1866	1866
261 Springfield	Wittenberg College *	Rev. S. A. Ort, D. D.	1845	1845
262 Tiffin	Heidelberg College	Rev. G. W. Williard, D. D., LL. D. ..	1851	1850
263 Urbana	Urbana University	Thomas F. Moses, A. M., M. D.	1850	1851
264 Westerville	Otterbein University	Rev. Henry Garst, D. D.	1847	1847
265 Wilmington	Wilmington College *	James B. Unthank, M. S.	1875	1870
266 Wooster	University of Wooster	Rev. Sylvester F. Scovel	1866	1870
267 Yellow Springs	Antioch College	Rev. Daniel A. Long, A. M., D. D., LL. D.	1852	1853
OREGON.				
268 Eugene City	University of Oregon	John W. Johnson, A. M.	1876	1876
269 Forest Grove	Pacific University and Tu- alatin Academy	Rev. J. F. Ellis, A. M., D. D.	1854	1848
270 McMinnville	McMinnville College	Rev. T. G. Brownson	1859	1860
271 Salem	Willamette University *	Rev. Thomas Van Scoy, A. M., D. D.	1853	1844
PENNSYLVANIA.				
272 Allegheny City	Western University of Pennsylvania	Milton B. Goff, A. M., LL. D.	1819	1819
273 Allentown	Muhlenberg College	Rev. Theodore L. Seip, D. D.	1867	1867
274 Annville	Lebanon Valley College	E. S. Lorenz	1867	1866
275 Beatty	St. Vincent's College	Rt. Rev. Andrew Hintenach, O. S. B.	1870	1846
276 Beaver Falls	Geneva College	Rev. H. H. George, D. D.	1853	1849
277 Carlisle	Dickinson College	Charles F. Himes, PH. D., acting president.	1783	1783
278 Chester	Pennsylvania Military Academy	Col. Charles E. Hyatt, C. E.	1862	1862
279 Easton	Lafayette College	Rev. James H. M. Knox, D. D., LL. D.	1826	1832
280 Freeland (College- ville, P. O.)	Ursinus College	Rev. J. H. A. Bomberger, D. D.	1869	1870
281 Gettysburg	Pennsylvania College	Rev. H. W. McKnight, D. D.	1832	1832

* Statistics of 1886-87.

Liberal Arts for 1887-88.—PART I—Continued.

Religious Denomination.	Professors and Instructors.			Students.								Number of Degrees Conferred in Course in 1887-88.	Pro- fessorships.	Number of Fellowships.	Number of Scholarships.	
	Number in Prepara- tory Department.	Number in Colle- giate Department.	Total Number.	Number in Pre- paratory Depart- ment.		Number in Col- legiate Depart- ment.		Number of Resi- dent Gradu- ates.		Total Number.						
				Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.					
6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
M. E.	4	10	14	48	44	16	23	0	1	64	73	7	.....	.....	.....	238
M. E. ....	.....	.....	7	.....	.....	53	12	.....	.....	114	50	5	.....	.....	.....	239
Reformed ..	.....	.....	11	24	20	17	3	0	1	41	24	5	.....	.....	.....	240
R. C.	3	9	13	160	0	80	0	0	0	240	0	11	.....	.....	.....	241
R. C.	16	10	26	360	0	55	0	0	0	415	0	7	0	0	0	242
Non-sect ...	0	15	15	0	0	90	24	3	1	93	25	4	0	0	0	243
Presb. and Cong.	0	11	11	0	0	49	16	.....	.....	49	16	10	.....	.....	60	244
Non-sect ...	.....	.....	5	14	35	1	6	.....	.....	15	41	7	.....	.....	.....	245
Lutheran ...	3	5	8	28	0	57	0	.....	.....	85	0	7	.....	.....	.....	246
Non-sect ...	.....	.....	26	131	17	167	23	.....	.....	298	45	23	.....	.....	.....	247
M. E. ....	.....	.....	21	374	90	216	154	2	9	593	253	60	0	0	0	248
Christian ...	5	8	13	116	115	10	25	0	0	126	140	0	0	0	9	249
P. E.	8	9	17	104	0	46	0	0	0	150	0	10	0	0	0	250
Non-sect ...	.....	.....	7	2	1	5	5	.....	.....	13	23	1	0	0	0	251
Baptist ...	4	8	12	(111)	.....	(88)	.....	1	0	(200)	.....	.....	8	0	0	252
Christian ...	8	7	15	45	15	26	11	3	2	140	81	2	1	0	0	253
Non-sect ...	2	8	10	94	0	87	0	.....	.....	181	0	17	.....	.....	38	254
M. E. ....	.....	.....	13	182	63	109	34	0	2	291	104	40	.....	.....	.....	255
United Pr. Cong.	6	11	17	86	34	.....	.....	.....	.....	101	77	4	.....	.....	.....	256
Non-sect ...	11	22	43	292	188	204	332	.....	.....	533	794	79	.....	.....	104	257
Free Bap. ...	0	7	7	.....	.....	.....	.....	.....	.....	72	5	0	0	0	0	258
M. E. ....	.....	.....	5	14	9	9	4	.....	.....	23	13	4	0	0	0	259
Lutheran ...	3	10	13	(86)	(97)	.....	.....	.....	.....	(183)	11	2	.....	.....	.....	260
Reformed ..	2	11	13	89	37	72	19	.....	.....	163	96	25	2	.....	.....	261
N. Church. ...	.....	.....	5	7	5	10	7	.....	.....	17	12	.....	.....	.....	5	263
U. B.	3	10	13	63	32	49	18	.....	.....	112	50	20	4	0	15	264
Friends ...	.....	.....	6	.....	.....	35	15	.....	.....	35	15	4	0	0	0	265
Presb. ....	.....	.....	29	141	52	188	58	.....	.....	329	110	49	6	0	40	266
Non-sect ...	16	57	39	33	21	.....	.....	5	4	123	126	4	.....	.....	.....	267
Non-sect ...	.....	.....	9	69	54	19	9	.....	.....	88	63	.....	.....	.....	.....	268
Cong. ....	.....	.....	6	42	36	17	5	.....	.....	59	41	6	1	.....	.....	269
Baptist ...	1	4	5	54	40	4	1	1	0	59	41	1	0	0	0	270
M. E.	6	6	12	133	71	24	12	.....	.....	221	115	.....	.....	.....	30	271
Non-sect ...	4	13	17	119	0	72	0	1	0	192	0	12	2	0	0	272
Lutheran ...	2	6	8	59	0	75	0	0	0	134	0	26	3	.....	23	273
U. B. ....	.....	.....	6	39	14	30	5	.....	.....	69	19	8	0	0	0	274
R. C. ....	.....	.....	21	48	0	110	0	3	0	296	0	2	.....	.....	.....	275
Ref. Pres. ...	1	7	8	15	8	50	22	.....	.....	{ 65 } { 30 }	20	.....	.....	.....	.....	276
M. E.	2	10	12	39	1	79	14	0	0	118	15	26	0	0	0	277
Non-sect ...	3	9	12	15	0	112	0	2	0	129	0	14	.....	.....	.....	278
Presb.	0	24	24	0	0	245	0	37	0	282	0	81	5	0	0	279
Ref. Ger. ...	.....	.....	14	.....	.....	52	4	0	0	125	24	13	0	0	0	280
Lutheran ...	3	9	12	56	6	119	0	3	0	173	6	39	4	.....	35	281

a Including theological department.

TABLE 49.—Statistics of Colleges of

	Location.	Name.	President.	Date of Charter.	Year of First Opening.
	1	2	3	4	5
	PENNSYLVANIA—continued.				
282	Greenville.....	Thiel College	Rev. David McKee, A. M.	1870	1870
283	Grove City.....	Grove City College	Isaac C. Ketler, A. M., PH. D.	1879	1876
284	Haverford College.....	Haverford College.....	Isaac Sharpless, SC. D.	1833	1833
285	Lancaster.....	Franklin and Marshall College.....	Rev. Thomas Gilmore Apple, D. D., LL. D.	1787	1787
286	Lewisburg.....	Bucknell University.....	David J. Hill, LL. D.	1843	1848
287	Meadville.....	Allegheny College.....	Rev. Wilbur G. Williams, D. D.	1815	1817
288	New Berlin.....	Central Pennsylvania College.....	Rev. Aaron E. Gobble, A. M.	1853	1855
289	New Wilmington.....	Westminster College.....	Rev. R. G. Ferguson, D. D.	1852	1852
290	Philadelphia.....	La Salle College	Brother Isidore.....	1863	1867
291	Philadelphia.....	University of Pennsylvania.....	William Pepper, M. D., LL. D.	1753	1751
292	Pittsburg.....	Catholic College of the Holy Ghost.....	Rev. John T. Murphy, C. S. SP.	1882	1878
293	Swarthmore.....	Swarthmore College.....	Edward H. Magill, LL. D.	1864	1869
294	Villanova.....	Villanova College	Rev. F. M. Sheeran, S. T. B., O. S. A.	1848	1842
295	Washington.....	Washington and Jefferson College.....	Rev. James D. Moffat, D. D.	1802	1802
	RHODE ISLAND.				
296	Providence.....	Brown University	Rev. E. G. Robinson, D. D., LL. D.	1764	1765
	SOUTH CAROLINA.				
297	Charleston.....	College of Charleston.....	H. E. Shepherd, A. M., LL. D.	1785	1785
298	Columbia.....	Allen University	J. W. Morris, A. M.	1881	1881
299	Columbia.....	South Carolina College.....	John M. McIryde, PH. D., LL. D.	1801	1805
300	Due West.....	Ersikine College	Rev. W. M. Greer, D. D.	1841	1839
301	Greenville.....	Furman University.....	Rev. Charles Manly, D. D.	1830	1851
302	Newberry.....	Newberry College	Rev. G. W. Holland, A. M., PH. D.	1856	1858
303	Spartanburg.....	Wofford College.....	James H. Carlisle, A. M., LL. D.	1851	1854
304	Walhalla.....	Adger College.....	Del Kemper.....	1877	1877
	TENNESSEE.				
305	Athens.....	Grant Memorial University.....	John F. Spence, S. T. D.	1867	1867
306	Bristol.....	King College *.....	Rev. J. Albert Wallace, A. M.	1870	1869
307	Chattanooga.....	Chattanooga University.....	Rev. Edward S. Lewis, A. M.	1886	1886
308	Clarks ville.....	South-western Presbyterian University.*	Rev. J. N. Waddel, D. D., LL. D.	1875	1875
309	Hiwassee.....	Hiwassee College.....	Rev. J. H. Brunner, A. M., D. D.	1850	1840
310	Jackson.....	South-western Baptist University.....	George W. Jarman, LL. D.	1874	1874
311	Knoxville.....	University of Tennessee; Tennessee Agricultural and Mechanical College.	Chas. W. Dabney, Jr.	1794	1795
312	Lebanon.....	Cumberland University.....	Nathan Green, LL. D., chancellor.	1842	1842
313	McKenzie.....	Bethel College.....	Rev. J. L. Dickens, A. M., PH. D.	1850	1847
314	Maryville.....	Maryville College.....	Rev. E. A. Elmore, A. M., chairman.	1842	1819
315	Memphis.....	Christian Brothers' College.	Rev. Brother Maurelian.....	1872	1871
316	Milligan.....	Milligan College.....	J. Hopwood, A. M.	1882	1869
317	Mossy Creek.....	Carson College.....	Rev. W. A. Montgomery, D. D.	1853	1849
318	Nashville.....	Central Tennessee College.....	Rev. J. Braden, D. D.	1866	1866
319	Nashville.....	Fisk University.....	Rev. E. M. Cravath, D. D.	1867	1867
320	Nashville.....	Roger Williams University.....	Rev. Alfred Owen, D. D.	1883	1864
321	Nashville.....	Vanderbilt University.....	L. C. Garland, A. M., LL. D.	1873	1875
322	Sewanee.....	University of the South.....	Rev. Telfair Hodgson, D. D.	1858	1868

* Statistics of 1886-87.

a Includes students in the biological and philosophical departments.

Liberal Arts for 1887-88.—PART I—Continued.

Religious Denomination.	Professors and Instructors.			Students.								Number of Degrees Conferred in Course in 1887-88.	Number of Endowed Professors.	Number of Fellowships.	Number of Scholarships.		
	Number in Preparatory Department.	Number in Collegiate Department.	Total Number.	Number in Preparatory Department.		Number in Collegiate Department.		Number of Resident Graduates.		Total Number.							
				Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.						
6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
Lutheran.....			7	27	6	42	8	0	1	69	15	29	2		0	41	282
Non-sect.....	5	5	10	120	165	144	90	0	0	264	255	12					233
Friends.....	0	18	18	0	0	87	0	0	0	87	0	17	2				13
Reformed....	2	9	11	23	0	97	0			120	0	23					115
Baptist.....			16	62	131	71	3			133	134	19	2	0	0	20	286
M. E.....	7	8	15	110	25	150	23			260	53	35	5				287
Ev. Ass'n....	2	4	6	43	0	31	10	0	0	79	10						288
Un. Presb....			10	43	50	76	23			119	78	30					289
R. C.....	6	11	17	139	0	141	0			230	0	5					16
Non-sect....			43	0	0	355	15			419	419	89	4				47
R. C.....	5	9	14	60	0	100	0			160	0						292
Friends.....			21	68	17	70	100	0	0	133	117	32	4	0	0	10	293
R. C.....			14					0	0	56	0	4					294
Presb.....			13	73	0	150	0			223	0	30	4				295
Non-sect.....	0	22	22	0	0	255	0	5	0	260	0	72	3		30		236
Non-sect.....		5	5			32				32		6				7	297
Af. M. E....			6			7				100	110	6					298
Non-sect....			16			136	0	13	0	149	0	31	0	0	0	6	299
As. Ref. Pr..	1	5	6	23		60				83		12					300
Baptist.....	2	5	7	46		76				122		11					301
Lutheran....	1	5	6	58	0	40	0	3	0	101	0	7	0	0	0	4	302
M. E. So....	2	7	9	61		72				133							303
Presb.....	1	3	4	44	0	44	0	0	0	88	0	0	0	0	0		304
M. E.....	6	13	19	147	71	55	16			211	87	13	3			15	305
Presb.....			5							66	0	4	1	0	0	0	306
M. E.....			9	62	22	11	5			73	29	0					307
Presb.....			9					9	0	150	0	26		0	0	12	308
M. E. So....			4							126		14					309
Baptist.....			6	14	0	108	0	0	0	122	0	7					310
Non-sect....			17							170	0				300		311
Cumb. Pr..	3	4	7							196	0	12	c4				312
Cumb. Pr..	2	3	5	109	87	43	13			152	100	3					313
Presb.....	4	8	12	132	86	30	9	1		163	95	8	0	0	0	1	314
R. C.....	10	11	21	73	0	199	0	0	0	272	0	5					315
Christian..	3	4	7	99	46	50	10			149	56	4	1				316
Baptist.....			4	91	0	33	0	0	0	124	0	9	1	0	0	0	317
M. E.....			12			13	2	0	1	173	234		0	0	0	2	318
Cong.....			19	26	7	35	7			212	260	5	0	0		7	319
Baptist.....			9	15	5	10	0			99	75		0				320
M. E. So....	0	23	23	0	0	190	0	16	0	206	0	15		7		10	321
P. E.....			13			314	0			314	0	5					322

b Department of the University of South Carolina.

c Partially.

TABLE 49.—Statistics of Colleges of

Location.	Name.	President.	Date of Charter.	Year of First Opening.
1	2	3	4	5
TENNESSEE—cont'd.				
323 Tusculum.....	Greeneville and Tusculum College.	Rev. Jere Moore, D. D.....	1794	1794
324 Winchester	Winchester Normal.....	James W. Terrill	1878	1878
TEXAS.				
325 Austin	University of Texas	Leslie Waggener, A. M., LL. D., chairman of faculty.	1881	1883
326 Fort Worth.....	Texas Wesleyan College....	Rev. A. A. Johnson, D. D.....	1881	1881
327 Galveston.....	St. Mary's University.....	Theobald W. Butler, S. J.....	1854	1855
328 Georgetown.....	South-western University..	Rev. John W. Heidt, A. M., D. D..	1875	1873
329 Hamilton	Hamilton College.....	S. M. N. Marrs	1885	1885
330 Italy	Hope Institute	A. T. Seitz	1886	1879
331 Mansfield	Mansfield Male and Female College.*	D. C. Limbaugh and S. P. Rander.	1872	1869
332 Salado	Salado College.....	Cyrus Ulrich	1860	1860
333 Tehuacana.....	Trinity University.....	L. A. Johnson.....	1870	1869
334 Waco	Baylor University	Rev. Rufus C. Burleson, D. D., LL. D.	1846	1846
UTAH.				
335 Salt Lake City	University of Deseret.....	John R. Park, M. D.....	1850	1850
VERMONT.				
336 Burlington.....	University of Vermont and State Agricultural College	Rev. Matthew H. Buckham, D. D.	1791	1800
337 Middlebury	Middlebury College	Ezra Brainerd, A. M.....	1800	1801
VIRGINIA.				
338 Ashland.....	Randolph Macon College....	W. W. Smith, A. M.....	1830	1832
339 Emory	Emory and Henry College....	Thomas W. Jordan, M. A.....	1839	1838
340 Hampden-Sidney..	Hampden-Sidney College....	Rev. Richard Melhwaite, D. D..	1783	1775
341 Lexington	Washington and Lee University.	Gen. G. W. C. Lee, LL. D.....	1782	1749
342 Richmond	Richmond College.....	H. H. Harris, M. A., LL. D., chairman of the faculty.	1840	1832
343 Salem	Roanoke College	Julius D. Dreher, A. M., PH. D.....	1853	1853
344 University of Virginia.	University of Virginia.....	William M. Thornton, chairman of the faculty.	1819	1825
WASHINGTON TERRITORY.				
345 Seattle	University of Washington Territory.	T. M. Gatch, A. M., PH. D.....	1861	1862
346 Walla Walla.....	Whitman College.....	A. J. Anderson, A. M., PH. D.....	1883	1866
WEST VIRGINIA.				
347 Flemington	West Virginia College.....	Thomas E. Peden	1869	1868
348 Morgantown.....	West Virginia University..	E. M. Turner, LL. D.....	1867	1867
WISCONSIN.				
349 Appleton.....	Lawrence University.....	Rev. Bradford P. Raymond, PH. D., D. D.	1849	1849
350 Beloit	Beloit College.....	Rev. Edward D. Eaton, D. D., LL. D.	1846	1847
351 Galesville	Galesville University.....	Rev. J. Irwin Smith, D. D.....	1854	1859
352 Madison	University of Wisconsin*...	T. C. Chamberlin, A. M., PH. D.....	1848	1849
353 Milton	Milton College.....	Rev. W. C. Whitford, A. M., D. D..	1867	1844
354 Racine	Racine College.....	Rev. A. Z. Gray, S. T. D.....	1852	1852
355 Ripon	Ripon College.....	Rev. Edward H. Merrell, D. D.....	1855	1855
356 St. Francis	Seminary of St. Francis of Sales.	Joseph Rainer .....	.....	1856
357 Watertown	North-western University*	Rev. Augustus F. Ernst	1867	1865

* Statistics of 1885-87.

Liberal Arts for 1887-88.—PART I—Continued.

Religious Denominations.	Professors and Instructors.			Students.								Number of Degrees Conferred in Course in 1887-88.	Pro- fessors.	Number of Fellowships.	Number of Scholarships.	
	Number in Prepara- tory Department.	Number in Colle- giate Department.	Total Number.	Number in Pre- paratory Department.		Number in Collegiate Department.		Number of Resi- dent Gradu- ates.		Total Number.						
				Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.					
6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Presb ..			5	50	34	19	9			69	43	4				328
Non-sect ...			9							(385)						324
Non-sect ...			11							135	42	6				325
M. E.....	3	4	7	90	92	15	25	0	0	105	117	2	0	0	0	326
R. C.....	3	5	8	45	0	60	0	5	0	110	0					327
M. E. So ..	4	8	12	76	0	155	0			233	0	0	0	0	0	328
	3	1	4	87	100	4				91	100	0				329
Non-sect ...			3							(142) (114)		0	0	0	0	330
Non-sect ...	1	2	3	45	32	17	11	2	1	64	42					332
Cumb. Pr...			15	116	72	60	40			176	112	5	2	0	0	333
Baptist ..			22	112	55	160	80	0	0	275	152	25	0	0	0	334
Non-sect ...			14							214	115	1				335
Non-sect ...			13			134	20	0	0	278	20	26	3			336
Non-sect ...	0	9	9	0	0	44	5	0	0	44	5	12	3	0	0	337
M. E. So ..			15			165	0	0	0	165	0	9	1		0	338
M. E. So ..	2	7	9	34	0	88	0	0	0	122	0	4				339
Non-sect ...			7			104	0	1	0	105	0	15	0			340
Non-sect ...			15			124	0	1	0	142	0	6	7	0	0	341
Baptist	0	7	7	0	0	150	0	0	0	150	0	14	1	0	0	342
Lutheran...			9	36	0	74	0			126	0	12				343
Non-sect ...			18							201	0	20	5	0	0	344
Non-sect ...			6	59	25	31	22	0	0	109	92	5	0	0		345
Non-sect ...			11	73	57	14	6	0	0	87	63	2	0	0	0	346
F. W. Bap...			5	10	3	8	1			38	14					347
Non-sect ...	3	10	13	68	0	105	0	0	0	173	0	6				348
M. E.....			12	44	22	41	28	1	0	86	50	21	1	0	0	349
Cong			14	206	0	59	0	0	0	265	0	15	5	0	0	350
Presb	1	3	4	34	20	6	1			40	21					351
Non-sect ...	0	37	37	0	0	283	103	2	1	283	104	36			10	352
7 Day Bap ..			9	65	91	36	36			101	127	7				353
Episcopal ...			17	115	0	22	0	2	0	137	0	4	0	0	0	354
Cong			14	135	118	21	17	0	0	163	159					355
R. C.....			12							212	0					356
Lutheran...	1	7	8	59	0	85	0	0	0	144	0	1				357

TABLE 49.—Statistics of Colleges of Liberal Arts for 1887-88.—PART II.

	2	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Name.	Number of Years in Course	Classical Course.	Preparatory to College	Number of Years in College Course.	Number of Volumes in Library.	Amount of Matriculation Fee.	Amount of Graduation Fee.	Annual Charge for Tuition to each Pupil.	Average Cost of Board and Lodging per Annum.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for Year from Productive Funds.	Amount of State or Municipal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.
ALABAMA.																	
1 Howard College.....	2	.....	.....	4	14,000	\$5	\$5	\$50	\$106	.....	* \$200,000	0	0	0	\$30,000	\$30,000	0
2 Spring Hill College.....	2	.....	.....	7	4,400	.....	10	8	(300)	\$800	300,000	.....	.....	.....	1,145	3,145	0
3 Selma University.....	.....	.....	.....	4	.....	.....	.....	.....	.....	50	25,000	.....	.....	.....	.....	.....	.....
4 University of Alabama.	.....	.....	.....	4	10,000	.....	.....	60	.....	32,500	300,000	\$302,000	\$24,000	0	1,420	25,420	\$500
ARKANSAS.																	
5 Arkansas College *.....	.....	.....	.....	4	800	.....	.....	25-40	120	.....	8,000	.....	.....	.....	.....	.....	.....
6 Cane Hill College.....	.....	.....	.....	4	.....	.....	.....	15-50	100	.....	.....	.....	.....	.....	950	1,055	2,900
7 Little Rock University.	4	.....	.....	4	1,000	.....	5	13-30	165	.....	80,000	.....	.....	.....	.....	.....	.....
8 Philander Smith College.	3	.....	.....	4	.....	.....	5	9	85	.....	20,000	.....	.....	.....	1,009	1,829	.....
CALIFORNIA.																	
9 College of St. Augustine.	4	.....	.....	4	3,000	.....	5	.....	300	.....	* 2,000	.....	.....	.....	.....	.....	.....
10 University of California.	.....	.....	.....	.....	37,500	.....	.....	0	.....	93,000	685,000	1,700,000	134,000	\$82,000	0	266,000	0
11 Pierce Christian College.	2	.....	.....	4	500	0	80	50	150	850	12,000	12,000	720	0	3,500	4,220	.....
12 St. Vincent's College.	3	.....	.....	4	3,000	.....	10	50	230	.....	* 100,000	.....	.....	.....	.....	.....	.....
13 University of Southern California.	.....	.....	.....	4	.....	.....	.....	40	200	.....	45,000	90,000	.....	.....	.....	114,000	.....

TABLE 49.—Statistics of Colleges of Liberal Arts for 1887-88.—PART II—Continued.

	2	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Name.		Number of Years in Course Classical Course.	Number of Years in Course Preparatory to College Scientific Course.	Number of Years in College	Number of Volumes in Li- brary.	Amount of Matriculation Fee.	Amount of Graduation Fee.	Annual Charge for Tuition to each Pupil.	Average Cost of Board and Lodging per Annum.	Value of Scientific Appa- ratus.	Value of Grounds and Build- ings.	Amount of Permanent Pro- ductive Funds.	Income for Year from Pro- ductive Funds.	Amount of State or Muni- cipal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.
36	FLORIDA. Rollins College.....	4	4	4	1,900	0	.....	\$33-48	\$105	\$200	\$35,000	\$200	\$12	0	\$2,769	\$2,781	\$2,840
37	GEORGIA. University of Geor- gia.....	.....	.....	.....	20,000	.....	.....	0	.....	100,000	168,000	445,202	32,000	.....	0	32,000	.....
38	Atlanta University.....	.....	.....	4	6,000	.....	.....	8-16	.....	5,000	160,000	28,000	1,330	0	2,543	26,690	28,200
39	Clark University.....	.....	.....	4	1,200	.....	.....	0	80	2,000	175,000	.....	.....	.....	2,000	9,000	4,500
40	Bowdon College.....	2	2	4	500	\$5-15	\$5	0	80	500	2,000	0	0	0	0	1,500	0
41	Emory College.....	.....	.....	.....	10,116	.....	.....	60	.....	10,000	100,000	100,000	6,000	0	5,800	11,800	.....
42	ILLINOIS. Hedding College.....	2	2	4	2,000	.....	.....	36	127	800	60,000	2,500	175	.....	2,000	4,000	2,000
43	Illinois Wesleyan University.....	2	2	4	3,000	.....	.....	39	.....	.....	150,000	72,989	4,087	.....	6,077	10,764	.....
44	St. Viator's College.....	3	3	7	3,500	5	.....	(175)	130	800	40,000	20,000	1,500	.....	*15,000	*15,000	.....
45	Cardinal College.....	3	4	4	12,000	.....	.....	40	.....	5,000	275,000	0	0	0	2,000	3,000	1,600
46	St. Ignatius College.....	4	.....	.....	.....	.....	.....	22	.....	2,500	67,000	54,000	6,320	.....	9,560	9,560	.....
47	Eureka College.....	.....	.....	.....	5,000	.....	.....	33	.....	59,000	455,000	1,785,255	46,716	.....	4,856	11,376	11,000
48	North-Western Uni- versity.....	.....	.....	.....	36,300	.....	.....	27-30	.....	.....	.....	.....	.....	0	24,623	71,389	25,000
49	Ewing College.....	2	2	4-5	-850	10	5	30	95	50	10,000	6,000	250	.....	1,575	1,875	0
50	Northern Illinois College.....	2	.....	4	700	.....	5	40	120	300	50,000	8,000	640	0	2,500	3,140	0

	German-English College.	29	600	5	120	2,000	10,000	8,000	600	1,500	2,800	
51	Knox College.....	3	2	4	45	2,000	115,000	198,752	13,732	11,135	25,965	
52	Lombard University.....	3	3	4	15-33	6,000	45,000	120,000	8,314	1,355	10,397	25,000
53	Illinois College.....	3	3	4	36-45	5,000	125,000	140,000	9,000	6,000	15,000	250,000
54	Lake Forest Univer- sity.				60	20,000	200,000	250,000	8,000		33,500	
55	McKendree College.....					10,000	25,000	20,000	61,600		1,600	1,000
56	Lincoln University.....	2	2	3-4	10		60,000	69,000	65,000	610,000	631,000	
57	Monmouth College.....	3	3	4	40	500	50,000	110,000	8,000	7,500	15,500	15,000
58	North-Western Col- lege.	2	1	4	130-195		50,000	90,000	8,500	2,500	11,000	
59	Chadwick College.....				18	140						
60	St. Francis Solanus College.				40-60	4,000	175,000	24,000	4,000	6,000	16,000	12,000
61	Augustana College.....				30	5,264	55,746			6,000	15,000	7,500
62	St. Joseph's Diocesan College.	3	3	4	75	6,000	150,000	50,000	3,000	6,600	17,000	21,000
63	Shurtleif College.....	3	3	4	20	150	52,655	80,104	4,784	3,986	8,770	500
64	Westfield College.....	2	1	3-4	104	2,000	45,000	8,000	600	2,700	3,327	9,327
65	Wheaton College.....	3	2	4	18-36	2,500	83,825	37,040	2,364	3,498	16,850	10,181
66	Indiana University.....				30							
67	Indiana University.....	2	2	4	618	10,000	100,000	250,000	10,776	64,432	40,343	0
68	Wabash College.....	2	2	4	39	130	*250,000	*175,000	*12,000	5,000	17,000	
69	Concordia College.....	3	3	4	21-40	2,000	100,000	110,000	7,500	4,500	120	
70	Franklin College.....	3	3	4	125	30,000	50,000	450,000	0		12,000	14,000
71	De Pauw University.....	2	2	4	18	300	20,000	10,000	600	500	2,000	500
72	Hanover College.....	2	1	4	28	1,100	125,000	*160,000	10,119	3,824	13,643	
73	Hartsville College.....	2	2	4	24		75,000	95,000	4,000	1,880	6,720	
74	Butler University.....	4	3	4			20,000	20,000	1,200	2,001	3,200	100
75	Union Christian Col- lege.	4	3	4	24-30	35,000	800,000		0			0
76	Moore's Hill College.....	2	2	4	65	200	150,000	65,000	4,000	5,500	9,500	56,000
77	University of Notre Dame.	3	3	4	90	200	30,000	15,000	1,400	*200	1,600	125
78	Earham College.....	1			100		620,000					
79	Ridgeway College.....											
80	St. Meinrad's College.....											
IOWA.												
81	Amity College.....	2	1	4	18-24	400	30,000	30,000	2,700	1,500	5,500	
82	Grissold College.....				50		200,000	80,000	6,000		74,000	
83	Norwegian Luther College.	3		4	10-20	70	110,000	6,227	374	692	1,066	
84	Drake University.....				30	8,000	70,000	80,000	5,000	20,000	40,000	0
85	University of Des Moines.	3	3	4	115	0	60,000	4,000	325	1,800	1,625	4,200

a Statistics of 1885-86.

b Contingent and library fees.

c Statistics of 1884-85.

* Statistics of 1880-87.

TABLE 49.—Statistics of Colleges of Liberal Arts for 1887-88.—PART II—Continued.

Name.	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
	Number of Years in Course	Number of Years in Course	Number of Years in College	Number of Volumes in Library	Amount of Matriculation Fee.	Amount of Graduation Fee.	Annual Charge for Tuition to each Pupil.	Average Cost of Board and Lodging per Annum.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for Year from Productive Funds.	Amount of State or Municipal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.
IOWA—continued.																
86 St. Joseph's College *	3	3	4	2,000	0	\$5	(\$195) \$38	\$280	\$1,000	\$58,000	\$36,000	\$2,900	0	\$6,850	\$8,150	\$1,500
87 Parson's College.....	3	3	4	2,000	0	5	21-33		1,000	45,000	10,000	600	0	4,000	9,000	4,000
88 Upper Iowa University.	3	3	4	4,000	0	5				50,000			0	6,000	7,000	200
89 Iowa College.....	3	3	4	12,000	0	5	30	152	2,100	107,600	170,000	13,600	0	6,252	19,000	65,000
90 Lenox College.....	2	2	4	1,800	0	5	33	108	1,200	15,000	15,000	700	0	3,424	4,129	0
91 Simpson College.....	2	2	4	2,000	0	5	30	112	2,500	30,000	27,000	1,800	0	4,000	6,300	16,000
92 State University of Iowa.				16,000			25		40,000	400,000	215,000	15,000	\$54,000	4,094	73,094	0
93 German College.....	3	3	4	400			7			15,000	20,000	1,400		1,200	2,600	
94 Cornell College.....	3	3	4	8,500	0	5	36	108	3,000	150,000	60,000	4,000	0	15,000	20,000	14,000
95 Oskaloosa College.....				4,000			30		5,000	35,000	11,000	900		2,050	7,450	2,000
96 Penn College.....	3	3	4	2,500		5	34	150	1,000	35,000				3,500	6,000	2,500
97 Central University of Iowa.	3	3	4	2,000			18	100	2,000	35,000	40,000				6,000	2,000
98 Tabor College.....			4	5,000		5	30	125		*70,963	*36,000	*3,500	0	*3,880	*13,600	*13,000
99 Western College.....	3	3	4	3,000	0	5	21	90	30,000	75,000	65,000	2,744	0	4,500	7,334	30,000
KANSAS.																
100 St. Benedict's College.	1			6,500			40	145		*75,000						
101 Baker University.....	2		4	3,000		5	29	150	2,000	100,000	7,000	400		7,000	7,400	
102 College of Emporia.....	3	3	4	2,500			30	135	1,000	105,000	25,000	1,750	0	2,520	27,000	28,000
103 Highland University.	3	3	4	5,000	0	5	15-33	120	1,000	15,000	21,000	1,500		1,613	3,608	200

		2		4	1, 100	0	1-5	40	110	800	50, 000	0	8, 100	46, 630	0	61, 082	1, 000
104	Campbell University																
105	University of Kansas				10, 000			0			510, 000	70, 000				63, 250	
106	Louisiana University				1, 100				78		75, 000	20, 000	1, 200			2, 500	
107	Ohio University	3	3	4	1, 100	0		20	48		30, 000	50, 000	5, 000			7, 500	
108	St. Mary's College	1		7	6, 000		10	30	170		40, 000	0	0			*7, 500	0
109	Kansas Wesleyan University	3	2	4	300		5	30	150	300	30, 000	31, 000	3, 000			2, 000	5, 000
110	Cooper Memorial College	2		4		5		30	140		40, 000	6, 000	200			350	600
111	Washington College	3		4	6, 000			30	108	6, 000	200, 000	100, 000	8, 000			5, 000	13, 000
112	Garfield University			4	1, 000	0	5	40	100	1, 000	200, 000	0	0	0		17, 740	17, 740
KENTUCKY.																	
113	Berea College	3	2	4	4, 000			9	75		100, 000	85, 000	5, 000			1, 550	6, 550
114	Oglethorpe College	2	2	4	1, 500	10	5	230	120	700	30, 000	130, 000	7, 500			90	8, 120
115	Centre College	3	3	4	8, 500	0	45	45		3, 500	70, 000	190, 000	9, 050	0		3, 462	13, 512
116	Finch College			4	2, 000		10	40-50	150	1, 200	0	0	0			6, 000	5, 000
117	Georgetown College	2	2	4	9, 000	0	0	50	100-120		50, 000	150, 000	6, 000	0		3, 200	10, 000
118	South Kentucky College	3		4	1, 000	3	5	40-50	160		50, 000					5, 000	5, 000
119	Kentucky University	1	1	4	13, 400	10	0	2	150	3, 000	133, 250	200, 000	15, 235	0		0	17, 510
120	Kentucky Wesleyan College	2	2	4	1, 000	20	10	20	175	750	20, 000	31, 000	2, 100	0		4, 500	
121	Murray Male and Female Institute and West Kentucky Normal School			4	*15						15, 000					*1, 000	*2, 500
122	Kentucky Classical and Business College	4	2	4	300		10	35	150	50	10, 000					2, 000	2, 500
123	Central University	3	3	4	4, 500	5	5	60	160	1, 000	100, 000	175, 000	7, 000			5, 000	12, 000
124	Bellevue College			2-4	3, 000		5	55	100	1, 000	50, 000	50, 000	3, 620			2, 000	7, 550
125	St. Mary's College			3-5	5, 000		5	50	150		30, 000					12, 000	13, 000
LOUISIANA.																	
126	Louisiana State University and Agricultural and Mechanical College			5	18, 805	0	0	0	140	25, 000	100, 000	318, 313	14, 556	10, 000		0	24, 556
127	St. Charles College	1	1	5	8, 500	10	5-10	50	200	300	40, 000					*14, 560	*14, 560
128	Centenary College of Louisiana			4		5	10	60	140		80, 000	15, 000				0	10, 700
129	Reade College	3	3	4		3	5	50	120	250	20, 000				0	3, 500	3, 500

c Free to residents.

b Contingent fees.

a Estimated.

* Statistics of 1886-87.

TABLE 49.—Statistics of Colleges of Liberal Arts for 1887-88.—PART II—Continued.

Name.	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
	Number of Years in Course	Number of Years in Course	Number of Years in College	Number of Volumes in Library.	Amount of Matriculation Fee.	Amount of Graduation Fee.	Annual Charge for Tuition to each Pupil.	Average Cost of Board and Lodging per Annum.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for Year from Productive Funds.	Amount of State or Municipal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.
LOUISIANA—cont'd.																
130 College of the Immaculate Conception.	2	3		19,000												
131 Ireland University...	5	4	4	800			\$8	\$80	\$900	\$125,000	\$95,000	\$5,000			\$5,000	\$5,000
132 New Orleans University.				4,000			8		3,000	75,000				\$971	6,071	
133 Southern University.	4	4	4	300	0	0	0	99	250	40,000	0	0	\$7,500	0	7,500	25
134 Straight University.	3		4	3,000		0	8	88	300	7,500		100	0	2,200	13,000	2,100
135 Tulane University of Louisiana.	3	3	4	49,000			50-100		74,811	211,000	1,102,217	82,086	0	19,729	102,415	50,000
136 Thatcher Institute...			4	250			(250)		12,000							
MAINE.																
137 Bowdoin College...				38,985			75		60,000	250,000	390,000	18,272	0	18,393	35,665	3,000
138 Bates College...			4	11,137			36	95	6,000	150,000	245,000	10,000		4,200	14,200	95,000
139 Colby University...			4	21,734	0	\$5	45	145	25,000	150,000	399,392	30,445	0	4,713	35,153	25,250
MARYLAND.																
140 St. John's College...	3	3	4	6,000	0	0	40-75	140-200	2,000	200,000	0	0	5,000	5,800	10,800	0
141 Baltimore City College.		5														
142 Johns Hopkins University.				35,000			100		152,731	675,699	3,000,000	192,000	0	23,480	215,480	0

143	Loyola College.....	2	4	8	20,000		10	75	3,000	40,000	14,000	3,276	22,000	4,000
144	Rock Hill College.....	4	4	4			5	60						
145	St. Charles's College.....	4	4	4	10,100			(180)						
146	Mt. St. Mary's College.....	2	2	4	10,000		10	(300)	8,000	150,000	0	30,000	30,000	800
147	New Windsor College and Windsor Female College.....	3		4	3,000					50,000				
148	Western Maryland College.....	2		4	1,500		5	45	500	60,000				4,000
MASSACHUSETTS.														
149	Amherst College.....			4	48,500		5	110	75,000	400,000	46,804	0	31,978	78,782
150	Boston College.....				15,000			60	5,000	150,000	0	0	12,000	65,100
151	Boston University.....			4	20,000						0	0	20,000	0
152	Harvard University.....			4	218,621					6,519,741	311,761	0	173,951	130,000
153	Tufts College.....			4	22,000			150	750,000	*800,000	45,687	0	4,770	581,704
154	Williams College.....			4	34,000			100	4,750,000	400,000	31,286	0	52,550	
155	College of the Holy Cross.....	2		4				105	10,000	250,000	613,000	28,297	67,553	73,585
MICHIGAN.														
156	Adrian College.....			4	5,000		5	6	2,000	125,000	4,000		4,300	5,000
157	Albion College.....		4	4	6,000		5	0	15,000	85,000	13,000	0	22,000	30,000
158	University of Michigan.....	4	4		53,102		10	635	425,000	620,000	62,861	54,250	72,295	42,000
159	Battle Creek College.....			4	1,300				1,092	93,975	0	0	2,891	9,491
160	Grand Traverse College.....	3	2	4				30-40		10,000	0			
161	Legs*.....			4										
162	Detroit College.....	3	3	4	6,550		5	40	2,000	95,000	0	0	7,487	0
163	Hillsdale College.....	3	3	4	7,120			0	20,000	80,000	142,000	0	11,587	20,000
164	Hope College.....	4	4	4	7,000		5	15	2,000	45,000	112,270	0	2,336	1,300
165	Kalamazoo College.....	3	3	4	4,909		5	25	1,100	119,000	103,000	0	2,643	14,307
166	Olivet College.....	3	2	4	15,000		5	30	1,100	106,000	169,000	0	4,783	19,000
MINNESOTA.														
166	St. John's University.....				12,000			(200)						
167	Hamline University.....	3	3	4	4,000		5	8-10	4,500	185,000	78,905	5,173	8,755	61,848
168	Macalester College.....	3	4	4	3,000			30-45	2,000	275,000	85,000	985	20,000	32,000
169	Augsburg Seminary.....				1,000			25	1,000	90,000	3,500	0	6,500	1,000
170	University of Minnesota.....			4	21,000			0		1,000,000	750,000	45,000	85,090	
171	Carleton College.....	3	3	4	8,300		5	24	20,169	187,639	300,787	0	9,951	150,738
MISSISSIPPI.														
172	Mississippi College.....		4	4	2,100		10	30-60	1,000	50,000	650	0	8,743	2,764
173	Rust University.....	8	4	4			5	9		70,000				
174	Kavanaugh College.....						5	30		3,000				
175	University of Mississippi.....			4	12,000		0	0	100,000	300,000	544,000	0	34,613	0

* Statistics of 1886-87. ^a Does not include income of the medical department. ^b For residents; \$25 for non-residents. ^c For residents; \$60 for non-residents.

TABLE 49.—Statistics of Colleges of Liberal Arts for 1887-88.—PART II.—Continued.

Name.	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
	Number of Years in Course Preparatory to College Class- sical Course.	Number of Years in Course Scientific Course.	Number of Years in College	Number of Volumes in Li- brary.	Amount of Matriculation Fee.	Amount of Graduation Fee.	Annual Charge for Tuition to each Pupil.	Average Cost of Board and Lodging per Annum.	Value of Scientific Appa- ratus.	Value of Grounds and Build- ings.	Amount of Permanent Pro- ductive Funds.	Income for Year from Pro- ductive Funds.	Amount of State or Muni- cipal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.
MISSOURI.																
176 South-west Baptist College.	2	2	5	600	\$20	\$35	\$30	\$80	\$100	\$25,000				\$2,000	\$31,860	
177 Pike County College.	1	1	4	300	0	5	36	108		5,000				2,500	3,130	
178 Christian University.			4	400	3		40	125	400	60,000	\$7,000	\$550	0	20,000	25,500	0
179 St. Vincent's College.			4	12,000		10			10,000	100,000	500,000	23,615	\$5,300	10,070	99,015	
180 University of the State of Missouri.				16,700	10					348,000						
181 Grand River College.			4	400			36	90		\$15,000	\$2,700	\$270	0	\$1,600	\$2,140	
182 Central College.	2	3	4	4,378	2	5	40-50	120	1,000	100,000	110,000	8,800	0	3,000	12,800	0
183 Westminster College.	3	2	4	5,000	0	5	40		1,200	45,000	75,000	4,500		3,500	8,000	
184 Lewis College.			4	5,000			25-30	150		100,000	8,500	510		1,500	14,010	\$9,500
185 Pritchett School In- stitute.			3	5,000	0	4	20-50	125	1,300	30,000	57,000	3,800	0	3,400	7,200	0
186 La Grange College.			4	1,800			(150)			\$20,000						
187 William Jewell Col- lege.	3		4	4,000	3	5	40	90-160		50,000	125,000	8,400	0	3,100	12,000	
188 Morrisville College.	4		4	500	2	10	25-40	100	600	10,000				3,200	3,400	
189 College of the Chris- tian Brothers.	6	4		10,000	0	10	60	300	5,000	600,000	0	0	0	15,000	15,000	0
190 St. Louis University.			4	25,000			60		160,000	650,000	650,000	35,000	0	650,000	85,000	
191 Washington Uni- versity.			4	10,000			100			625,000						
192 Drury College.	4	4	4	20,000			30-48	150-200	1,575	200,000	72,000	5,586		3,271	19,116	10,359
193 Tarkenton College.	2	2	4	300			30	100	250	40,000	30,000	1,000		1,600	3,200	300
194 Central Wesleyan College.			4	3,600			22-36		1,500	50,000	30,000	2,250		3,200	8,200	1,000

TABLE 49.—Statistics of Colleges of Liberal Arts for 1887-88.—PART II—Continued.

Name.	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
	Number of Years in Course	Preparatory to College	Number of Years in College	Number of Volumes in Library.	Amount of Matriculation Fee.	Amount of Graduation Fee.	Annual Charge for Tuition to each Pupil.	Average Cost of Board and Lodging per Annum.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Pro-ductive Funds.	Income for Year from Pro-ductive Funds.	Amount of State or Municipal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.
NEW YORK—cont'd.																
214 Hamilton College*.....	4	20,000	.....	.....	\$75	162	.....	\$500,000	\$280,000	\$13,931	.....	\$8,000	\$8,000	.....
215 Hobart College.....	3-4	22,000	\$5	.....	75	209	\$7,560	143,000	272,708	\$13,931	0	5,423	24,723	.....
216 Madison University.....	3	4	18,500	0	0	50	150	7,000	200,000	520,000	35,000	.....	7,000	42,000	\$75,000
217 College of the City of New York.	1	4	23,869	0	0	0	.....	225,000	225,000	36,500	1,375	\$150,000	.....	151,375	.....
218 Columbia College.....	4	93,144	5	\$15	130	.....	520,532	1,530,000	8,788,910	233,940	0	143,606	377,546	6,000
219 Manhattan College.....	4	4	10,300	10	0	60	250	3,000	450,000	0	0	0	13,500	13,500	1,500
220 University of the City of New York.	4	16,000	.....	7	0	.....	40,000	210,000	450,000	27,400	0	2,500	33,550	32,500
221 Niagara University.....	4	9,000	.....	5	.....	.....	.....	262,000	.....	.....	.....	30,000	30,000	.....
222 University of Rochester.	4	23,150	0	20	75	(250)	48,542	381,847	479,354	20,235	0	7,121	40,369	108,074
223 Union College.....	4	.....	.....	.....	75-90	.....	80,000	500,000	*264,294	*14,779	.....	*6,202	*43,257	5,500
224 Syracuse University.....	4	32,000	5	20	30-100	.....	78,750	380,000	385,691	22,472	0	16,982	60,242	425,000
NORTH CAROLINA.																
225 University of North Carolina.	4	25,000	.....	.....	60	150	25,000	250,000	130,000	7,800	20,000	7,033	84,883	.....
226 Biddle University.....	2	4	3,400	.....	.....	0	.....	.....	75,000	8,000	.....	0	.....	.....	1,200
227 Davidson College.....	1	4	11,000	.....	5	60	105	5,000	150,000	115,000	7,500	.....	3,000	11,500	4,000
228 North Carolina College.	3	4	1,994	.....	.....	40	65	1,000	20,000	15,000	.....	0	1,500	1,500	1,200
229 Shaw University.....	2	4	3,000	.....	.....	8	.....	5,000	150,000	5,000	250	.....	1,600	10,850	1,500
230 Rutherford College..	2	4	3,000	2	5	10-40	70	.....	8,500	0	0	0	.....	1,000	0

TABLE 49. — *Statistics of Colleges of Liberal Arts for 1887-88.* — PART II — Continued.

Name.	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
	Number of Years in Course	Number of Years in Course	Number of Years in College	Number of Volumes in Library.	Amount of Matriculation Fee.	Amount of Graduation Fee.	Annual Charge for Tuition to Each Pupil.	Average Cost of Board and Lodging per Annum.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Pro-ductive Funds.	Income for Year from Pro-ductive Funds.	Amount of State or Municipal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.
OREGON.																
268 University of Oregon	3	2	4	2,000			\$40	\$125		\$277,000	\$210,000	\$99,000	\$85,000	\$34,000	\$18,000	
269 Pacific University and Tualatin Academy.	3	3	3-4	6,200		\$5	30-45	130	\$1,000	30,000	90,000	8,000		2,450	10,500	
270 McMinnville College	3	3	4	400	0	2-5	24-40	120	75	30,000	16,000	1,300	0	621	2,475	\$500
271 Willamette University.*			4	2,500			39	100		75,000	50,000	3,000		7,000	10,000	10,000
PENNSYLVANIA.																
272 Western University of Pennsylvania.	3	3	4	5,500	0	5	60-80	180	25,000	120,000	275,000	17,363	0	10,909	28,277	2,500
273 Muhlenberg College.	3		4	8,300		5	50	141		80,000	130,000	7,500		2,500	9,500	50,000
274 Lebanon Valley College.	2	1	4	2,676	\$1	5	40	146	600	50,000	8,000	360		3,413	5,708	900
275 St. Vincent's College.				21,000	5	5	(200)	125		50,000	100,000		0	\$12,189	\$31,630	0
276 Geneva College.	2	2	4	3,000		7	39	6	1,000	225,000	272,238	6,000		5,000	10,000	600
277 Dickinson College.	2	2	4	31,000			6	110-143	35,000	225,000			0	5,000	5,819	8,525
278 Pennsylvania Military Academy.	1	2	4	1,000		10	(500-530)			\$100,000						
279 Lafayette College.			4	22,000	10	0	45	250	50,000	600,000	272,303	13,823	0	\$5,480	\$30,175	11,500
280 Ursinus College.	2	2	4	6,000		0	27-43		10,000	38,000			0		3,500	20,000
281 Pennsylvania College.	3	3	4	22,000		5	50	200		125,000	125,000	7,500		4,500	12,000	100,000
282 Thiel College.	3		4	5,113		5	40	160	500	50,000	40,000		0	1,950	1,950	300

283	Grove City College.....	3	2	4	2,000	5	30-40	150	1,000	50,000	215,000	10,000	0	9,500	9,500	15,000
284	Flaxford College.....	4	4	4	17,000	0	150	330	50,000	300,000	250,000	8,200	0	12,000	22,000	25,000
285	Franklin and Marshall College.....	3	.....	4	13,000	5	35	136	50,000	115,000	250,000	8,200	0	802	10,035	25,000
286	Bucknell University.....	3	2	4	10,050	5	50	120	7,000	130,000	270,000	13,500	.....	2,950	16,450	25,000
287	Allegheny College.....	3	3	4	16,000	10	50	100	30,000	130,000	150,000	8,035	.....	7,810	15,845	5,000
288	Central Pennsylvania College.....	2	1	4	2,300	5	32	150	600	22,000	22,000	.....	.....	1,893	2,811	25
289	Wesminster College.....	3	2	4	.....	5	0	24	.....	770,000	*100,000	*6,000	.....	.....	*6,000	.....
290	La Salle College.....	6	2	4	8,192	5	10	80	8,000	112,000	112,000	18,000	.....	18,000	18,000	.....
291	University of Pennsylvania.....	.....	.....	4	60,000	20	100-200	.....	150,983	1,256,807	1,404,460	44,898	0	123,050	172,948	97,185
292	Catholic College of the Holy Ghost.....	4	6	4	2,000	5	60	260	2,500	160,000	.....	.....	0	.....	.....	.....
293	Swarthmore College.....	3	3	4	12,950	0	150-200	200-250	.....	600,000	400,000	20,000	0	46,750	66,750	160,000
294	Villanova College.....	3	3	4	5,000	5	8-10	(250)	.....	.....	.....	.....	.....	.....	.....	.....
295	Washington and Jefferson College.....	3	3	4	10,200	4-8	24	.....	25,000	175,000	250,000	17,097	0	0	25,751	2,145
RHODE ISLAND.																
296	Brown University.....	.....	.....	4	55,055	5	8	100	.....	625,000	800,800	47,550	0	22,904	70,879	137,227
SOUTH CAROLINA.																
297	College of Charleston.....	.....	.....	4	10,000	0	40	.....	2,000	20,000	240,400	10,000	800	1,400	14,000	0
298	Allen University.....	.....	.....	.....	.....	.....	.....	.....	.....	20,000	.....	.....	.....	391	1,331	.....
299	South Carolina College.....	.....	.....	4	27,000	3	40	30	100,000	325,000	35,750	1,000	37,560	3,600	43,550	.....
300	Erskine College.....	2	2	4	1,500	10	100	100	150	30,000	74,000	5,000	.....	.....	5,200	.....
301	Furman University.....	3	2	3-5	6,100	0	50-70	.....	2,000	50,000	35,000	2,800	0	3,500	6,500	.....
302	Newberry College.....	3	.....	4	5,000	5	45	.....	6,000	25,000	22,000	1,550	0	2,400	4,850	0
303	Wofford College.....	.....	.....	4	5,000	10	5	40	.....	53,000	50,000	.....	0	.....	.....	0
304	Adger College.....	2-3	.....	4	2,000	5	20-40	100	150	10,000	10,000	600	0	.....	61,308	0
TENNESSEE.																
305	Grant Memorial University.....	3	3	4	4,000	6	24	125	2,500	60,000	50,000	1,500	.....	3,200	8,000	10,000
306	Knox College.....	.....	.....	4	700	.....	40-50	100	.....	15,000	25,000	1,200	.....	.....	1,500	250
307	Chattanooga University.....	3	3	4	644	.....	30	.....	3,645	200,000	.....	14,000	0	1,016	15,016	0
308	South-Western Presbyterian University.....	.....	.....	3-5	3,000	.....	50	100	.....	100,000	140,000	8,000	0	3,000	12,200	10,000
309	Hivasssee College.....	.....	.....	4	.....	2	25-40	.....	.....	*15,000	.....	.....	.....	.....	.....	.....
310	South-Western Baptist University.....	2	1	4	7,000	1	50	112	.....	50,000	43,000	2,300	0	.....	2,530	.....

Statistics of 1884-85.

Statistics of 1885-86.

Statistics of 1886-87.

TEXAS.													
325	University of Texas.	4	4	.....	0	30,000	250,000	630,322	44,713	.....	3,240	47,953	.....
326	Texas Wesleyan College.	3	4	300	0	200	50,000	0	0	.....	5,500	6,500	1,500
327	St. Mary's University	2	7	700	.....	400	50,000	.....	.....	0	.....	.....	.....
328	South-Western University.	3-4	3-4	.....	.....	135	65,000	.....	.....	.....	.....	.....	.....
329	Hamilton College.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
330	Hope Institute.	330	.....	.....	25	100	8,000	0	0	885	1,700	885	0
331	Ministerial Male and Female College.	331	.....	.....	32	80	3,500	.....	.....	700	.....	2,400	.....
332	Salado College.	.....	.....	.....	36	112	15,000	.....	.....	.....	.....	.....	.....
333	Trinity University.	333	4	4,500	50	1,000	40,000	23,500	.....	0	.....	.....	30,000
334	Baylor University.	334	4	3,500	30-50	125	10,000	150,000	2,000	0	9,800	11,800	.....
UTAH.													
335	University of Deseret.	2	2	4,088	40	2,000	150,000	.....	.....	5,000	7,000	12,000	.....
VERMONT.													
336	University of Vermont and State Agricultural College.	.....	4	37,000	69	60,000	330,000	120,000	10,000	0	5,754	16,414	20,000
337	Middlebury College.	.....	4	16,000	45	90	4,000	100,000	10,200	0	1,129	11,561	10,500
VIRGINIA.													
338	Randolph Macon College.	.....	.....	5,000	75	10,000	50,000	110,000	6,000	0	8,000	18,500	30,000
339	Emory and Henry College.	2	4	9,000	50	170	2,000	50,000	3,000	.....	7,200	10,000	4,000
340	Hampton Sidney College.	.....	4	10,000	60	122	.....	115,000	7,500	0	2,250	9,750	.....
341	Washington and Lee University.	.....	.....	18,900	50	.....	235,000	601,204	32,673	0	5,105	39,778	5,000
342	Richmond College.	.....	2-5	9,200	70	100	300,000	210,000	12,500	0	6,000	18,500	60,000
343	Remond College.	.....	2	16,000	50	70-125	75,000	25,000	1,000	0	4,000	6,500	25,000
344	University of Virginia.	.....	.....	*48,000	.....	148-175	.....	*282,600	617,066	635,000	631,406	689,072	.....
WASHINGTON TERRITORY.													
345	University of Washington Territory.	3	3	3,000	40	2,300	250,000	.....	.....	5,300	3,800	9,100	0
346	Whitman College.	.....	3-4	2,900	39-48	700	55,000	10,000	1,000	0	6,402	9,536	4,550
* Statistics of 1880-87.													
a Statistics of 1884-85.													
b Statement for 1887-88.													

Statement for 1887-88.

Statistics of 1884-85.

Statistics of 1886-87.

TABLE 49.—*Statistics of Colleges of Liberal Arts for 1887-88.*—PART II—Continued.

Name.	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
	Number of Years in Course Classical Course.	Number of Years in Course Preparatory to College	Number of Years in College Scientific Course.	Number of Volumes in Li- brary.	Amount of Matriculation Fee.	Amount of Graduation Fee.	Annual Charge for Tuition to each Pupil.	Average Cost of Board and Lodging per Annum.	Value of Scientific Appa- ratus.	Value of Grounds and Build- ings.	Amount of Permanent Pro- ductive Funds.	Income for Year from Pro- ductive Fund.	Amount of State or Muni- cipal Aid Received within the Year.	Amount from Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.
2																
WEST VIRGINIA.																
347 West Virginia Col- lege.....	2	2	4	200			\$24-28	\$00	\$10,000	\$10,000	\$225	\$14			\$14	
348 West Virginia Uni- versity.....	2	2	4	5,000			38	150		100,000	107,000	6,300	\$18,000	\$500	21,600	
WISCONSIN.																
349 Lawrence University.....	4	2	4	11,507	0	\$40	15-24		2,800	50,000	92,731	5,657	0	1,613	13,630	\$3,305
350 Detroit College.....	3	3	4	13,670	0	9	43		13,000	119,670	200,000	14,323	0	5,470	24,379	23,565
351 Gatesville Univer- sity.....	4			2,500		5	20-25		300	20,000				700	5,300	6,100
352 University of Wis- consin.....			4	15,000			all	150		1,000,000	218,618	12,050	237,003	9,708	278,921	
353 Milton College.....	3	3	4	3,316		2	24-36	85	600	37,400	32,543	852		3,165	7,564	10,561
354 Racine College.....	6	6	4	10,000	\$25	0	75	350		125,000	30,000	1,800	0		623,000	13,600
355 Ripon College.....	3	3	4			5	24-34	84-110		63,000	150,000	11,500	0	350	11,850	5,000
356 Seminary of St. Francis of Sales, North-Western Uni- versity.*			4	12,200			165			*180,000				30,000	30,000	
				2,000			30	100		60,000				1,150	7,150	

* Statistics of 1886-87.

a For non-residents.

b Statistics of 1885-86.

List of Universities and Colleges from which no Information has been Received.

Location.	Name.	Location.	Name.
Greensborough, Ala....	Southern University.	South Orange, N. J....	Seton Hall College.
San Francisco, Cal.....	St. Mary's College.	Alfred Centre, N. Y....	Alfred University.
Macon, Ga.....	Mercer University.	Brooklyn, N. Y.....	St. John's College.
Macon, Ga.....	Pio Nono College.	Fordham, N. Y.....	St. John's College.
Carlinville, Ill.....	Blackburn University.	New York, N. Y.....	College of St. Francis Xavier.
Terre Haute, Ind.....	St. Bonaventure's College.	New Athens, Ohio....	Franklin College.
Mount Pleasant, Iowa	Iowa Wesleyan University.	Wilberforce, Ohio....	Wilberforce University.
Bardstown, Ky.....	St. Joseph's College.	Corvallis, Oregon....	Corvallis College.
Farmdale, Ky.....	Kentucky Military Institute.	Philomath, Oregon....	Philomath College.
New Liberty, Ky.....	Concord College.	Lincoln University, Pa.	Lincoln University.
Convent P. O., La....	Jefferson College (St. Mary's).	Loretto, Pa.....	St. Francis College.
Chestertown, Md.....	Washington College.	Philadelphia, Pa.....	St. Joseph's College.
Nebraska City, Nebr..	Nebraska College.	Spencer, Tenn.....	Burritt College.
York, Nebr.....	Methodist Episcopal College of Nebraska.	Sherman, Tex.....	Austin College.
		Bethany, W. Va.....	Bethany College.

Memoranda to Table 49.

Location.	Name.	Remarks.
Greenwood, Mo.....	Lincoln College.....	Suspended.
Sedalia, Mo.....	Sedalia University.....	Mail returned.
La Grande, Oregon.....	Blue Mountain University..	Mail returned.
Monmouth, Oregon.....	Christian College.....	Discontinued.
Jefferson, Pa.....	Monongabeia College.....	Discontinued.

DISTRIBUTION OF COLLEGE STUDENTS BY STATES.

In response to repeated calls for the information, Table 51 has been prepared, showing the distribution of college students by States.

The data have been drawn from the catalogues of two hundred and eighty-eight colleges, which publish the residences of their students. In all but thirty-one cases the catalogues were for the year 1887.¹

In twenty-five cases the catalogues of 1885-86 were employed; in five those of 1884-85, and in one case the catalogue of 1888.

Students in preparatory and professional departments have been excluded save in the case of nine colleges, where distinction was impossible. In these, however, the majority of the students were known to be collegiate.

The totals in Column 57, Table 51, show the number of students attending the colleges of the respective States.

The total at the foot of each column shows the number of students attending college from the State whose name heads the column.

Reading the table from left to right the entry in each column shows the number of students in the colleges of the State named at the left of the line to be credited to the State named at the head of the column.

Reading down a column the entries show in what States the students credited to the State whose name appears at the top of the column are attending college.

Table 50 presents in a somewhat condensed form the particulars given in Table 51. Column 2 shows the number of college students credited to each State, and Column 3 the ratio of the same to the college population. Column 5 shows the total number of students in the colleges of each State so far as known to the Office. The remaining columns show the geographical distribution of the students attending the colleges of the several States. By reference to Table 51, it appears from Column 57 that there were 432 students attending colleges in Maine. Reading from left to right it appears that 373 of these were credited to Maine, 29 to New Hampshire, 2 to Vermont, 15 to Massachusetts, etc. Again, the total at the foot of Column 3 shows that Maine furnished 496 college students. Reading down the column it appears that 373 of these were attending colleges in Maine, 17 in New Hampshire, 63 in Massachusetts, etc.

¹ This includes 1886-87, 1887, 1887-88.

TABLE 50.—Summary of Statistics Showing Distribution of College Students.

States.	Distribution by States.		Number of Students from Each Geographical Section in Colleges of the State, and Ratio of Same to Entire Number in Colleges of the State.													
	Number of College Students from—	Population of College Age to 21, 16-21 Inclusive to One College Student.	Number of Colleges in States	Total Attendance in Colleges of States.	North Atlantic Division.		South Atlantic Division.		South Central Division.		North Central Division.		Western Division.		Foreign.	
					Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.
1	6	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NORTH ATLANTIC DIVISION.																
1	497	178	3	432	422	97.68	3	.7	1	.2	2	.4	3	.7	1	.2
2	229	217	1	231	212	91.73	2	.1	1	.5	13	5.63	3	1.4	5	2.37
3	319	138	2	211	196	92.9	1	.5	1	1.5	8	4	1	.5	31	1.35
4	1,521	184	6	3,293	1,932	94.25	44	1.91	17	.51	221	9.64	48	2.71	8	1.35
5	215	263	1	243	225	92.6	3	1.23	3	1.23	7	2.9	3	1.24	2	.8
6	546	170	3	1,160	861	74.87	31	2.70	15	1.30	204	17.74	26	2.26	13	1.13
7	2,915	263	14	2,240	2,075	90.61	39	4.6	13	.5	114	4.97	9	.4	49	2.2
8	698	263	4	700	655	83	46	5.83	9	1.14	59	7.46	13	1.65	8	1.01
9	2,433	281	23	2,376	1,940	81.65	236	9.93	26	1.09	134	5.64	11	.5	29	1.22
SOUTH ATLANTIC DIVISION.																
10	Delaware.....	383			273	27.14	533	56.71	36	3.55	83	8.07	13	1.26	34	3.30
11	Maryland.....	673	9	1,093	173	26.53	236	33.26	41	6.2	163	25	10	1.53	9	1.3
12	District of Columbia.....	298	5	662	12	1.46	666	81.3	122	16	11	1.34	6	.73	2	.24
13	Virginia.....	752	5	819	2	1.04	190	98.96								
14	West Virginia.....	298	3	192	6	.83	703	99	3	.41					1	.14
15	North Carolina.....	863	7	718	4	.41	476	96.39	14	3	2	.41				
16	South Carolina.....	597	262	454	2	.41	476	96.39	50	8.11	1	7.6	1	.16		
17	Georgia.....	656	388	616			563	91.4	2	2.63	6					
18	Florida.....	171	310	79	1	1.26	70	89								
SOUTH CENTRAL DIVISION.																
	Kentucky.....	1,465	12	1,415	6	.42	18	1.27	1,320	93.29	54	3.82	6	.42	11	.78

20	Tennessee.....	2,201	121	18	3,990	19	.62	264	8.54	2,684	86.86	102	3.30	12	.39	9	.29
21	Alabama.....	507	454	4	434	.....	.....	17	3.91	400	92.16	.....	.....	.....	.....	17	3.91
22	Mississippi.....	703	255	3	550	.....	.....	.....	.....	544	98.93	1	.18	2	.36	3	.54
23	Louisiana.....	181	852	8	676	.....	.....	5	.74	668	98.82	.....	.....	.....	.....	3	.44
24	Texas.....	1,494	269	5	1,221	.....	.....	2	.16	1,211	99.18	.....	.....	3	.25	5	.41
25	Arkansas.....	271	621	4	162	.....	.....	.....	.....	162	100	.....	.....	.....	.....	.....	.....
26	Indian Territory.....	30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH CENTRAL DIVISION.																	
27	Ohio.....	2,457	202	24	2,421	109	8.92	44	2	36	1.5	2,088	86.24	21	.87	33	1.36
28	Indiana.....	965	344	9	859	12	1.39	5	.58	11	1.27	1,824	95.92	6	.69	1	.11
29	Illinois.....	2,120	241	23	2,014	35	1.73	3	.14	29	1.44	1,862	92.13	12	.59	73	3.61
30	Michigan.....	1,189	246	9	1,736	106	6.10	17	.....	13	1.04	1,557	89.69	22	1.26	16	.92
31	Wisconsin.....	744	337	6	636	10	1.57	.....	.....	3	.47	622	97.79	1	.16	.....	.....
32	Minnesota.....	735	257	4	613	13	2.12	.....	.....	1	.16	594	97.79	2	.32	3	.5
33	Iowa.....	1,457	188	16	1,351	10	.74	3	.22	8	.59	1,320	97.70	.....	.....	2	.22
34	Missouri.....	1,426	272	15	1,165	1	.08	1	.08	37	8.2	1,116	95.3	8	.7	2	.17
35	Dakota.....	114	642	3	40	.....	.....	.....	.....	2	.....	49	100.73	.....	.....	.....	.....
36	Nebraska.....	451	275	3	418	7	1.67	1	.21	2	5	396	94.73	5	1.3	7	1.7
37	Kansas.....	647	312	9	761	6	.8	1	.13	33	4.33	687	90.3	25	3.28	9	1.2
WESTERN DIVISION.																	
38	Montana.....	28	514	1	18	.....	.....	.....	.....	.....	.....	3	16.67	15	83.33	.....	.....
39	Colorado.....	142	284	3	73	.....	.....	.....	.....	.....	.....	4	5.47	68	93.13	1	1.36
40	Washington Territory.....	162	250	2	74	.....	.....	.....	.....	.....	.....	2	2.70	72	97.30	.....	.....
41	Oregon.....	193	186	5	197	.....	.....	.....	.....	.....	.....	2	1.01	195	98.98	.....	.....
42	California.....	1,513	98	10	1,505	3	.19	.....	.....	4	.26	7	.46	1,472	97.80	19	1.26

TABLE 51.—*Showing State Residence of Students in Two Hundred and Eighty-eight Colleges; also the States in which these Students Attend College.*

NORTH ATLANTIC DIVISION.

Name.	Number of Colleges.	Maine.	New Hampshire.	Vermont.	Massachusetts.	Rhode Island.	Connecticut.	New York.	New Jersey.	Pennsylvania.	Total.
1	2	3	4	5	6	7	8	9	10	11	12
NORTH ATLANTIC DIVISION.											
Maine.....	3	373	29	2	15	.....	.....	1	1	1	422
New Hampshire.....	1	17	91	55	37	.....	2	9	1	.....	212
Vermont.....	2	.....	1	166	6	.....	.....	23	.....	.....	196
Massachusetts.....	6	63	63	52	1,137	.....	63	364	38	74	1,932
Rhode Island.....	1	1	8	7	42	126	23	11	7	.....	225
Connecticut.....	3	14	17	15	71	21	335	266	38	84	861
New York.....	14	3	2	6	48	16	26	1,782	94	98	2,075
New Jersey.....	4	.....	.....	.....	5	1	.....	160	371	115	655
Pennsylvania.....	23	1	.....	2	10	5	.....	63	92	1,767	1,940
SOUTH ATLANTIC DIVISION.											
Delaware.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maryland.....	6	4	7	2	38	12	50	63	32	71	279
District of Columbia.....	5	7	3	3	29	2	12	46	7	64	173
Virginia.....	5	.....	.....	.....	2	.....	4	.....	.....	6	12
West Virginia.....	1	.....	.....	.....	.....	.....	.....	.....	.....	2	2
North Carolina.....	7	.....	.....	.....	.....	.....	.....	.....	1	5	6
South Carolina.....	5	.....	.....	.....	.....	1	.....	.....	.....	1	2
Georgia.....	5	.....	.....	.....	.....	.....	.....	1	.....	.....	1
Florida.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	1
SOUTH CENTRAL DIVISION.											
Kentucky.....	12	1	1	.....	.....	.....	1	.....	.....	1	6
Tennessee.....	18	.....	.....	.....	3	.....	.....	8	.....	8	19
Alabama.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mississippi.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Louisiana.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Texas.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Arkansas.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Indian Territory.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
NORTH CENTRAL DIVISION.											
Ohio.....	24	3	.....	.....	12	1	14	37	10	122	199
Indiana.....	9	.....	.....	.....	.....	.....	.....	3	.....	7	12
Illinois.....	23	.....	1	4	2	.....	.....	5	.....	19	35
Michigan.....	9	5	5	4	4	2	.....	52	2	29	106
Wisconsin.....	6	1	.....	.....	4	.....	2	3	.....	.....	10
Minnesota.....	4	2	.....	1	2	.....	2	4	1	1	13
Iowa.....	16	.....	.....	.....	3	.....	.....	3	.....	4	10
Missouri.....	15	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Dakota.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nebraska.....	3	.....	.....	.....	1	.....	.....	3	.....	3	7
Kansas.....	9	1	.....	.....	.....	.....	.....	3	1	1	6
WESTERN DIVISION.											
Montana.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colorado.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington Territory.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oregon.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
California.....	10	.....	.....	.....	.....	.....	1	2	.....	.....	3
Wyoming Territory.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	288	496	229	319	1,521	215	545	2,915	698	2,483	9,421

TABLE 51.—*Showing State Residence of Students in Two Hundred and Eighty-eight Colleges; also the States in which these Students Attend College—Continued.*

SOUTH ATLANTIC DIVISION.

Name.	Number of Colleges.	Delaware.	Maryland.	District of Columbia.	Virginia.	West Virginia.	North Carolina.	South Carolina.	Georgia.	Florida.	Total.
1	2	13	14	15	16	17	18	19	20	21	22
NORTH ATLANTIC DIVISION.											
Maine.....	3					2				1	3
New Hampshire.....	1			1		1					2
Vermont.....	2			1							1
Massachusetts.....	6	6	10	19	2	1	1	2	1	2	44
Rhode Island.....	1		1					1	1		3
Connecticut.....	3	8	7	7	2	1	2		3	1	31
New York.....	14	3	3	8	1			14		1	30
New Jersey.....	4	4	11	19	3		2	1	4	2	46
Pennsylvania.....	23	30	100	12	21	13	47	7	2	4	236
SOUTH ATLANTIC DIVISION.											
Delaware.....	6	10	463	40	31	13	8	6	10	2	583
Maryland.....	5	4	35	141	30	5	12	11	14	4	256
District of Columbia.....	5	4	21		540	33	30	14	15	9	666
Virginia.....	1		2		1	187					1.0
West Virginia.....	7				19		640	40	6	3	703
North Carolina.....	5						12	454	8	2	476
South Carolina.....	5				1	1	4	16	511	23	563
Georgia.....	1									70	70
Florida.....											
SOUTH CENTRAL DIVISION.											
Kentucky.....	12		1	5		4			5	3	18
Tennessee.....	18	2	10	1	93	4	43	23	59	21	264
Alabama.....	4								11	6	17
Mississippi.....	3										
Louisiana.....	8				1				3	1	5
Texas.....	5				1	1					2
Arkansas.....	4										
Indian Territory.....											
NORTH CENTRAL DIVISION.											
Ohio.....	24		7	3	3	26		3	1	1	44
Indiana.....	9					1	1		1	3	5
Illinois.....	23		1		2						3
Michigan.....	9			1	7	4			1	4	17
Wisconsin.....	6										
Minnesota.....	4										
Iowa.....	16				1		1			1	3
Missouri.....	15									1	1
Dakota.....	3										
Nebraska.....	3					1					1
Kansas.....	9		1								1
WESTERN DIVISION.											
Montana.....	1										
Colorado.....	3										
Washington Territory.....	2										
Oregon.....	5										
California.....	10										
Wyoming Territory.....											
Total.....	238	71	673	258	762	208	803	597	656	171	4,289

TABLE 51.—Showing State Residence of Students in Two Hundred and Eighty-eight Colleges; also the States in which these Students Attend College—Continued.

SOUTH CENTRAL DIVISION.

Name.	Number of Colleges.	Kentucky.	Tennessee.	Alabama.	Mississippi.	Louisiana.	Texas.	Arkansas.	Indian Territory.	Total.
1	2	23	24	25	26	27	28	29	30	31
NORTH ATLANTIC DIVISION.										
Maine	3	1								1
New Hampshire	1						1			1
Vermont	2									
Massachusetts	6	6	4		1	4	1	1		17
Rhode Island	1		2				1			3
Connecticut	3	11	2			2				15
New York	14	2	3		1	7				13
New Jersey	4	6	1	1		1				9
Pennsylvania	23	5	3		1	2	8	5	2	26
SOUTH ATLANTIC DIVISION.										
Delaware										
Maryland	6	9	4	8	4	8	1	2		36
District of Columbia	5	7	11	2	3	10	6	2		41
Virginia	5	32	28	11	6	11	26	3	5	122
West Virginia	1									
North Carolina	7		1	1			1			3
South Carolina	5		8	4	1		1			14
Georgia	5		9	16	14	1	5	1	3	49
Florida	1	2								2
SOUTH CENTRAL DIVISION.										
Kentucky	12	1,195	45	4	11	13	20	29	3	1,320
Tennessee	18	116	2,050	142	127	63	134	49	3	2,684
Alabama	4	1	2	311	18	58		1		400
Mississippi	3		7	1	483	42	3	8		544
Louisiana	8				24	608	36			668
Texas	5			1	3	5	1,197	5		1,211
Arkansas	4		2		2			151	7	162
Indian Territory										
NORTH CENTRAL DIVISION.										
Ohio	24	16	9	1	2		5		3	36
Indiana	9	7		1			2	1		11
Illinois	23	23	1			1	3	1		29
Michigan	9	5					9	4		18
Wisconsin	6		1				1		1	3
Minnesota	4						1			1
Iowa	16	1			2		4	1		8
Missouri	15	3	6	1		7	13	6	1	37
Dakota	3									
Nebraska	3			1			1			2
Kansas	9	16	2	1		8	3	1	2	33
WESTERN DIVISION.										
Montana	1									
Colorado	3									
Washington Territory	2									
Oregon	5									
California	10	1				1	2			4
Wyoming Territory										
Total	288	1,465	2,201	507	703	852	1,494	271	30	7,523

TABLE 51.—Showing State Residence of Students in Two Hundred and Eighty-eight Colleges; also the States in which these Students Attend College—Continued.

NORTH CENTRAL DIVISION.

Name.	Number of Colleges.	Ohio.	Indiana.	Illinois.	Michigan.	Wisconsin.	Minnesota.	Iowa.	Missouri.	Dakota.	Nebraska.	Kansas.	Total.
1	2	32	33	34	35	36	37	38	39	40	41	42	43
NORTH ATLANTIC DIVISION.													
Maine.....	3	2											2
New Hampshire.....	1	5		6		1					1		13
Vermont.....	2	1	6	1									8
Massachusetts.....	6	65	12	53	13	18	14	8	24	1	5	3	221
Rhode Island.....	1			5									7
Connecticut.....	3	69	9	70	14	3	20	1	14	1	2	1	204
New York.....	14	49	9	20	8	4	6	7	3	2	3	3	114
New Jersey.....	4	26	2	12	2	1	4	4	4	1		3	59
Pennsylvania.....	23	74	6	19	4	3	5	10	4	1	4	4	134
SOUTH ATLANTIC DIVISION.													
Delaware.....	6	25	12	15	4	7	4	5	6	1	1	3	83
Maryland.....	5	36	15	25	13	19	9	19	19	2	2	3	163
District of Columbia.....	5	4	2	1					4				11
Virginia.....	1												
West Virginia.....	7												
North Carolina.....	5			1					1				2
South Carolina.....	5	1											1
Georgia.....	1			1	5								6
Florida.....	1												
SOUTH CENTRAL DIVISION.													
Kentucky.....	12	12	20	5		1		2	8	1		5	54
Tennessee.....	18	8	9	11	4			3	56			11	102
Alabama.....	4												
Mississippi.....	3		1										1
Louisiana.....	8												
Texas.....	5												
Arkansas.....	4												
Indian Territory.....													
NORTH CENTRAL DIVISION.													
Ohio.....	24	1,803	49	95	42	20	12	25	11	11	4	16	2,088
Indiana.....	9	182	632	31	11		2	5	2	1		8	824
Illinois.....	23	19	44	1,482	21	42	27	91	84	2	21	28	1,861
Michigan.....	9	109	67	121	1,038	34	46	50	23	13	14	42	1,557
Wisconsin.....	6	2		45	1	553	5	2	2	2	4	1	622
Minnesota.....	4	7		1	3	13	545	6		19			594
Iowa.....	16	1	5	41	1	16	29	1,173	20	7	15	12	1,320
Missouri.....	15		59				3	7	1,036				1,116
Dakota.....	3			2						46		1	49
Nebraska.....	3	6	4	5	2		1	17	3	2	343	13	396
Kansas.....	9	9	1	44	3	4	1	17	100		32	476	687
WESTERN DIVISION.													
Montana.....	1						1	2					3
Colorado.....	3	1		1						1		1	4
Washington Territory.....	2					1		1					2
Oregon.....	5							2					2
California.....	10	1	1	1			2		2				7
Wyoming Territory.....													
Total.....	258	2,457	965	2,120	1,189	745	736	1,457	1,426	114	451	647	12,317

TABLE 51.—*Showing State Residence of Students in Two Hundred and Eighty-eight Colleges; also the States in which these Students Attend College—Continued.*

WESTERN DIVISION.

Name.	Number of Colleges.	Montana.	Wyoming.	Colorado.	New Mexico.	Arizona.	Utah.	Nevada.	Idaho.	Washington.	Oregon.	California.	Total.	Foreign.	Total Number.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
NORTH ATLANTIC DIVISION.															
Maine.....	3			3									3	1	432
New Hampshire.....	1			2									3		231
Vermont.....	2												1	5	211
Massachusetts.....	6			9	1				1	2	3	32	48	31	2,293
Rhode Island.....	1											3	3	2	243
Connecticut.....	3			9			1					12	26	13	1,150
New York.....	14			1	2		4			4		2	9	49	2,290
New Jersey.....	4			2			1			3		6	13	8	790
Pennsylvania.....	23			3		1			1			6	11	29	2,376
SOUTH ATLANTIC DIVISION.															
Delaware.....															
Maryland.....	6			1			1			3		8	13	34	1,428
District of Columbia.....	5	2		1	4				1	1		1	10	9	652
Virginia.....	5			2					1	1		2	6	2	819
West Virginia.....	1														192
North Carolina.....	7													1	718
South Carolina.....	5														494
Georgia.....	5											1	1		615
Florida.....	1														79
SOUTH CENTRAL DIVISION.															
Kentucky.....	12	2										4	6	11	1,415
Tennessee.....	18	1		1						1		9	12	9	3,090
Alabama.....	4													17	434
Mississippi.....	3						1			1			2	3	550
Louisiana.....	8													3	676
Texas.....	5				2							1	3	5	1,221
Arkansas.....	4														162
Indian Territory.....															
NORTH CENTRAL DIVISION.															
Ohio.....	24	4		7	1		2			2	1	4	21	33	2,421
Indiana.....	9			1						1	1	4	6	1	859
Illinois.....	23		2	2						1	1	6	12	73	2,013
Michigan.....	9	1		7			7			3	1	3	22	16	1,736
Wisconsin.....	6	1											1		636
Minnesota.....	4								1	1			2	3	613
Iowa.....	16											7	7	3	1,351
Missouri.....	15			4					1	2	1		8	2	1,165
Dakota.....	3			3											49
Nebraska.....	3											2	5	7	418
Kansas.....	9	3		16	4	1						1	25	9	761
WESTERN DIVISION.															
Montana.....	1	14					1						15		18
Colorado.....	3			68									68	1	73
Washington Territory.....	2								1	68	3		72		74
Oregon.....	5								9	136		50	125		197
California.....	10				1	23	11	30	7	10	36	1,354	1,472	10	1,505
Wyoming Territory.....															
Total.....	285	25	2	142	15	25	29	39	10	102	193	1,520	2,101	399	36,050

SCHOOLS OF SCIENCE ENDOWED BY THE NATIONAL LAND GRANT.

REMARKS ON TABLE 52.

Table 52 presents the summarized statistics of thirty-two institutions endowed by the land grant of 1862. To these must be added the Oregon State Agricultural College at Corvallis, which reports no particulars beyond the fact that the present is the first year of its existence as an independent agricultural college, and fifteen departments of agriculture and the mechanic arts, whose work cannot be exhibited separately from that of the universities of which they are parts (vid., p. 736).

This gives a total of forty-eight institutions that have received the benefit of the national land grant of 1862.

Thirty-eight of these institutions have an officer of the Army or Navy detailed to act as professor of military science and tactics in accordance with the statute¹ providing for such detail. Where a State has more than one school endowed by the national land grant of 1862, the school which is reported by the Governor of the State as most nearly meeting the requirements of existing law is held to have the first claim to the officer allotted to the State. So far not more than one detail for land-grant institutions has been made to a single State, so that five local departments in Georgia and one school in each of the following States, Massachusetts, Mississippi, Missouri, South Carolina, and Virginia, have not received the benefit of the law.

¹ [Extract from the Revised Statutes of the United States as amended by the act of Congress approved September 26, 1888.]

SEC. 1225. The President may, upon the application of any established military institute, seminary or academy, college or university, within the United States having capacity to educate at the same time not less than one hundred and fifty male students, detail an officer of the Army or Navy to act as superintendent, or professor thereof; but the number of officers so detailed shall not exceed fifty from the Army, and ten from the Navy, being a maximum of sixty, at any time, and they shall be apportioned throughout the United States, first, to those State institutions applying for such detail that are required to provide instruction in military tactics under the provisions of the act of Congress of July second, eighteen hundred and sixty-two, donating lands for the establishment of colleges where the leading object shall be the practical instruction of the industrial classes in agriculture and the mechanic arts, including military tactics; and after that, said details to be distributed, as nearly as may be practicable, according to population. The Secretary of War is authorized to issue, at his discretion and under proper regulations to be prescribed by him, out of ordnance and ordnance stores belonging to the Government, and which can be spared for that purpose, such number of the same as may appear to be required for military instruction and practice by the students of any college or university under the provisions of this section, and the Secretary shall require a bond in each case, in double the value of the property, for the care and safe keeping thereof, and for the return of the same when required: *Provided*, That nothing in this act shall be so construed as to prevent the detail of officers of the Engineer Corps of the Navy as professors in scientific schools or colleges as now provided by act of Congress approved February twenty-sixth, eighteen hundred and seventy-nine, entitled "An act to promote a knowledge of steam-engineering and iron-ship building among the students of scientific schools or colleges in the United States;" and the Secretary of War is hereby authorized to issue ordnance and ordnance stores belonging to the Government on the terms and conditions hereinbefore provided to any college or university at which a retired officer of the Army may be assigned as provided by section twelve hundred and sixty of the Revised Statutes.

Endowed with the National Land Grant for 1887-88.

[illegible]

The conditions brought to view by the statistical records of two successive years show comparatively little change in the status of a class of institutions like those under consideration. The total of State appropriations for 1887-88 exceeds the amount reported in 1886-87 by \$114,481.

Omitting Oregon, whose agricultural college makes no report this year, fourteen States made larger appropriations than in 1886-87, their excess amounting to \$161,707. Eight States made smaller appropriations, the total decrease for these being \$44,755. This shows for the States represented both years a net increase of \$116,952 in State appropriations.

Of the total income reported, viz, \$1,555,507, productive funds yielded 41.75 per cent.; State or municipal appropriations, 32.93 per cent.; tuition fees, 15.03 per cent., leaving a small portion unaccounted for.

The total of benefactions received by these institutions in 1887-88 amounted to \$163,000, divided among four institutions, as against \$302,810 in 1886-87, which was distributed among nine institutions.

PROGRESS IN FIVE YEARS.

In the case of individual institutions, the detailed statistics reported in one year vary but little from those of the next year. The changes that take place during a term of years are more significant.

The following tabulation shows the relative status of twenty-six land-grant colleges as regards increase or decrease in the number of instructors and students, and the value of productive funds according to the statistics reported in 1882-83, and in 1887-88.

The Florida State Agricultural College has been organized during the period, and consequently does not appear in this study. The five colleges of Georgia are also omitted, as changes that have taken place in their organization would make the comparison misleading. It is hoped that the data for completing this view and extending it through the successive years may be secured in time for use in the next Report.

TABLE 53.—Showing for the Colleges Endowed with the National Land Grant the Percentage of Increase or of Decrease in Instructors, Students, and Productive Funds in 1887-88, as Compared with 1882-83, according to Returns made to this Office.

Name.	Instructors.		Students.		Productive Funds.	
	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
State Agricultural and Mechanical College (Alabama Polytechnic Institute).	33	.....	37.6	.....	.....	.2
Arkansas Industrial University.....	75	.....	6.52	.....	.....	.....
State Agricultural College (Colorado)	150	.....	34.57	.....	.....	.....
Sheffield Scientific School of Yale University.	14.81	.....	55.61	.....	.....	.....
Delaware College.....	16.66	.....	.....	80	0	0
University of Illinois.....	11.53	.....	10.55	.....	41.06	.....
Purdue University.....	11.44	.....	31.43	.....	.....	.....
Iowa Agricultural College.....	35	.....	.7	.....	.6	.....
Kansas State Agricultural College....	57.14	.....	50.64	.....	38.82	.....
Agricultural and Mechanical College of Kentucky.	.....	.....	15.57	.....	0	0
Maine State College of Agriculture and the Mechanic Arts.	11.11	.....	52.32	.....	76.33	.....
Maryland Agricultural College.....	14.28	.....	.....	.....	3.06	.....
Massachusetts Agricultural College..	7.14	.....	17.7	.....	50.	.....
Massachusetts Institute of Technology.	95.35	.....	43	.....	7.45	.....
Michigan State Agricultural College..	66.66	.....	43.83	.....	32.23	.....
Agricultural and Mechanical College of the State of Mississippi.	21.44	.....	.....	9.78	.....	13.2
Alcorn Agricultural and Mechanical College.	.....	.....	.....	4.03	0	0
Missouri School of Mines and Metallurgy.	20	.....	.....	3.75	.....	.....
New Hampshire College of Agriculture and the Mechanic Arts.	.....	18.18	.....	13.63	32.27	.....
Scientific School of Rutgers College..	7.14	.....	57.4	.....	.....	.....
Cornell University.....	68.08	.....	125.78	.....	238.76	.....
Pennsylvania State College.....	25	.....	60.57	.....	0	0
Clafin University.....	.....	.....	290	.....	.....	.....
State Agricultural and Mechanical College of Texas.	88.88	.....	.....	17.05	2.45	.....
Virginia Agricultural and Mechanical College.	.....	.....	3.4	.....	.....	4.55
Hampton Normal and Agricultural Institute.	8	.....	41.35	.....	119.36	.....

DISTRIBUTION OF STUDENTS IN PRACTICAL WORK AND IN DEGREE COURSES.

Table 54 shows the distribution of the students in the land-grant colleges in the various lines of practical work as reported to this Office the present year, and also the distribution of the students in the collegiate departments in the several degree courses.

It will be observed that the totals in the second column, which have been used as the basis in determining the percentages of students in practical work, include all students, while the totals in the twentieth column, used as the basis of the second series of computations, include only the students in the collegiate department.

The nineteenth column of the table shows the status of military tactics in the college; V, indicating that the exercise is voluntary; O, obligatory, and N, no information.

TABLE 5A.—*Showing, for the Colleges Endowed with the National Land Grant, the Percentage of Students Engaged in Practical Work; also the Percentage of Collegiate Students in the Several Degree Courses in 1887-88.*

DISTRIBUTION OF STUDENTS IN PRACTICAL WORK.

Name.	Total Number of Students.	Field and Garden Work.		Surveying.		Shop-Work.		Laboratory.		Observatory.		Industrial Art.		Household Industry.		Military Tactics.	
		Number.	Percent. of Total.	Number.	Percent. of Total.	Number.	Percent. of Total.	Number.	Percent. of Total.	Number.	Percent. of Total.	Number.	Percent. of Total.	Number.	Percent. of Total.	Number.	Percent. of Total.
1 State Agricultural and Mechanical College (Polytechnic Institute) (Alabama).....	172	99	57.56	53	30.81	101	58.72	52	30.23	0	.....	0	.....	0	.....	158	91.86
2 State Agricultural College (Colorado).....	109	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70	64.22
3 Delaware College.....	107	.....	.....	6	35.3	.....	.....	17	100	.....	.....	.....	.....	.....	.....	17	100
4 North Georgia Agricultural College (University of Georgia).....	143	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	99	69.23
5 University of Illinois.....	377	31	8.22	53	14.06	130	34.21	85	22.6	6	1.6	85	22.6	0	.....	225	59.68
6 Purdue University.....	353	11	3	37	10.05	105	29.53	307	83.4	.....	.....	167	45.4	52	14.13	100	27.17
7 Iowa Agricultural College.....	287	150	52.26	21	7.32	21	7.32	237	100	.....	.....	.....	.....	69	24.04	130	52.26
8 Kansas State Agricultural College.....	470	66	14.04	39	8.3	232	50	102	21.7	.....	.....	330	70.21	18	3.83	171	37.02
9 Agricultural and Mechanical College of Kentucky.....	326	30	9.2	27	8.28	10	3.07	.....	.....	.....	.....	.....	.....	.....	.....	210	64.41
10 Maine State College of Agriculture and the Mechanic Arts.....	131	39	30	25	19.09	17	13	40	30.53	.....	.....	.....	.....	.....	.....	119	90.83
11 Maryland Agricultural College.....	49	49	100	15	30.61	0	.....	32	6.51	.....	.....	.....	.....	.....	.....	49	100
12 Massachusetts Agricultural College.....	113	55	48.67	37	32.73	0	.....	68	60.18	0	.....	0	.....	0	.....	105	92.92
13 Massachusetts Institute of Technology.....	720	0	.....	130	18.05	192	26.67	692	69.11	.....	.....	.....	.....	.....	.....	217	30.13
14 Michigan State Agricultural College.....	314	225	71.66	91	29.00	145	46.17	149	47.45	35	11.11	.....	.....	.....	.....	126	40.12
15 Agricultural and Mechanical College of the State of Mississippi.....	256	286	100	30	10.5	.....	.....	92	32.17	.....	.....	.....	.....	.....	.....	281	98.25
16 Alcorn Agricultural and Mechanical College (Mississippi).....	238	199	83.61	6	2.52	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17 Missouri School of Mines and Metallurgy (University of Missouri).....	50	.....	.....	50	100	.....	.....	50	100	.....	.....	.....	.....	.....	.....	.....	.....
18 New Hampshire College of Agriculture and the Mechanic Arts.....	38	20	52.63	7	18.42	21	55.26	25	66	5	13.16	.....	.....	.....	.....	.....	.....
19 Rutgers Scientific School.....	85	.....	.....	.....	.....	.....	.....	84	99	.....	.....	.....	.....	.....	.....	84	99
20 Pennsylvania State College.....	167	12	7.2	26	15.57	59	35.33	126	75.45	.....	.....	.....	.....	.....	.....	106	63.47
21 Cladon University and South Carolina Agricultural College and Mechanics' Institute.....	197	54	27.41	.....	.....	69	35.03	.....	.....	.....	.....	.....	.....	120	60.91	250	126.9
22 State Agricultural and Mechanical College of Texas.....	130	130	60.75	38	17.76	175	81.77	15	7	.....	.....	.....	.....	.....	.....	209	97.66
23 Virginia Agricultural and Mechanical College.....	152	5	3.3	4	2.63	50	3.29	24	15.79	.....	.....	.....	.....	.....	.....	147	96.71
24 Hampton Normal and Agricultural Institute.....	695	88	12.9	.....	.....	131	21.65	.....	.....	.....	.....	.....	.....	173	23.6	254	41.98

TABLE 54.—*Showing, for the Colleges Endowed with the National Land Grant, the Percentage of Students Engaged in Practical Work; also the Percentage of Collegiate Students in the Several Degree Courses in 1887-88—Continued.*

DISTRIBUTION OF COLLEGE STUDENTS IN DEGREE COURSES.

	Name.	Total Number in Collegiate Course.	A. B. Course.		B. S. Course.		B. L. Course.		C. E. or B. C. E. Course.		M. E. Course.		Other First Degree Courses.		Veterinary Medical Course.		C. Ph. Course.	
			Number.	Percent. of Collegiate.	Number.	Percent. of Collegiate.	Number.	Percent. of Collegiate.	Number.	Percent. of Collegiate.	Number.	Percent. of Collegiate.	Number.	Percent. of Collegiate.	Number.	Percent. of Collegiate.	Number.	Percent. of Collegiate.
1	State Agricultural and Mechanical College (Polytechnic Institute) (Alabama).....	151	.....	.....	151	100	.....	.....	1	.66	.....	.....	.....	.....	.....	.....	.....	.....
2	Arkansas Industrial University.....	85	24	28.23	14	16.47	.....	.....	24	28.23	2	2.35	.....	.....	.....	.....	.....	.....
3	State Agricultural College (Colorado).....	69	.....	.....	69	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	Delaware College.....	17	2	11.8	15	88.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5	State Agricultural College (Florida).....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6	North Georgia Agricultural College (University of Georgia).....	74	54	73	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7	University of Illinois.....	269	8	2.97	177	65.8	63	23.42	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8	Purdue University.....	243	.....	.....	98	40.33	.....	.....	27	11.11	52	21.4	28	11.52	.....	.....	.....	.....
9	Iowa Agricultural College.....	283	.....	.....	156	55.12	69	24.03	23	8.12	21	7.42	18	6.36	.....	.....	.....	.....
10	Kansas State Agricultural College.....	470	.....	.....	470	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11	Agricultural and Mechanical College of Kentucky.....	213	.....	.....	33	26.83	.....	.....	40	32.52	45	35.58	.....	.....	.....	.....	.....	.....
12	Maine State College of Agriculture and the Mechanical Arts.....	123	.....	.....	37	30.08	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
13	Maryland Agricultural College.....	40	3	7.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
14	Massachusetts Agricultural College.....	105	.....	.....	105	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	Massachusetts Institute of Technology.....	718	.....	.....	519	72.28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
16	Michigan State Agricultural College.....	313	.....	.....	302	96.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17	Agricultural and Mechanical College of the State of Mississippi.....	6175	.....	.....	92	12.57	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18	Alcorn Agricultural and Mechanical College (Mississippi).....	45	.....	.....	44	97.77	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
19	New Hampshire College of Agriculture and the Mechanical Arts.....	38	.....	.....	38	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	Rutgers Scientific School.....	84	.....	.....	76	90.47	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
21	Cornell University.....	967	60	6.2	155	16.03	80	8.27	111	11.48	.....	.....	236	28.54	.....	.....	.....	.....
22	Pennsylvania State College.....	90	.....	.....	76	84.44	.....	.....	.....	.....	3	.33	.....	.....	.....	.....	.....	.....
23	Cladin University and South Carolina Agricultural College and Mechanics' Institute.....	18	10	55.55	8	44.45	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	State Agricultural and Mechanical College of Texas.....	211	.....	.....	30	14.21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25	Virginia Agricultural and Mechanical College.....	140	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

a Also six graduate students in M. S. course.

b Also three graduate students in M. S. course.

c This includes B. C. E. and B. M. E.

EFFECT OF THE HATCH ACT.

The appropriation of \$15,000 to each State by the General Government* for the maintenance of experiment stations has had a very stimulating influence upon the agricultural departments of the colleges here considered.

An inquiry as to the relation of the colleges with the State stations was included in the forms issued for them the present year. The information thus elicited is here summarized:

Name.	The Status of Land Grant, Agricultural and Mechanical Colleges with respect to Experimental Stations.
State Agricultural and Mechanical College (Alabama Polytechnic Institute).	Station established by college; enlarged by Hatch fund.
Arkansas Industrial University	None.
University of California (College of Agriculture).	Conducts experimental station with aid of State appropriations.
State Agricultural College (Colorado).	Under Hatch act, Feb., 1888, station united with central station at college; four auxiliary stations established elsewhere in State.
Sheffield Scientific School of Yale University.	
Delaware College.....	State agricultural station connected with college.
State Agricultural College (Florida)...	State agricultural experiment station under provisions of the Hatch bill.
State College of Agriculture and the Mechanic Arts (University of Georgia).	
South-west Georgia Agricultural College.	
North Georgia Agricultural College...	None.
West Georgia Agricultural and Mechanical College.	
Middle Georgia Military and Agricultural College.	
South Georgia College of Agriculture and the Mechanic Arts.	
University of Illinois.....	State agricultural experimental station, a department of the university; president of university presiding officer; working forces distinct.
Purdue University.....	Station established at university.
Iowa Agricultural College.....	Under Hatch bill, experimental station, a department of the college.
Kansas State Agricultural College....	Station a department of the college, under a council of professors.
Agricultural and Mechanical College of Kentucky.	Agricultural experimental station a department of the college; established in 1885.
Louisiana State University and Agricultural and Mechanical College.	State experimental station located on college grounds.
Maine State College of Agriculture and the Mechanic Arts.	State experimental station under Hatch bill, a department of the agricultural department of the college.
Maryland Agricultural College	Agricultural experimental station under college trustees; president of college director; other officers, and also funds, distinct.
Massachusetts Agricultural College...	No relations except president of college and two trustees, members of board of control.
Michigan State Agricultural College..	State experiment station, a department of the college under Hatch bill; governed by State board of agriculture; president of college, director.
University of Minnesota.....	University professor of agriculture, director of station; staff and equipment enlarged under provision of Hatch act.
Agricultural and Mechanical College of the State of Mississippi.	State agricultural experiment station a department of the college.
Alocorn Agricultural and Mechanical College (Mississippi).	
Missouri Agricultural and Mechanical College (University of Missouri).	
Missouri School of Mines and Metallurgy (University of Missouri).	
Industrial College of the University of Nebraska.	Connected with station.
University of Nevada	Connected with station.
New Hampshire College of Agriculture and the Mechanic Arts.	Station part of the college, funds separate and devoted to purposes indicated in Hatch bill.
Scientific School of Rutgers College..	Station in part under same management as college; distinct organizations and lines of work.
Cornell University	Appropriations under Hatch act given in charge of university for purposes specified.
Agricultural and Mechanical College of the University of North Carolina.	Connected with station.
Ohio State University	Connected with station.

* For the full provisions of the Hatch act, authorizing the appropriation, see p. 729.

Name.	The Status of Land Grant, Agricultural and Mechanical Colleges with Respect to Experimental Stations.
State Agricultural College (Oregon)..... Pennsylvania State College	Station a distinct department under Hatch act, aided by State appropriations; part of the station staff connected with college faculty.
Brown University	State stations distinct from college.
South Carolina College of Agriculture and Mechanic Arts.	None.
Cladlin University	Connected with station.
University of Tennessee and Agricultural and Mechanical College.	Agricultural experiment station a department of the college.
State Agricultural and Mechanical College of Texas.	.
University of Vermont and State Agricultural College.	Station a department of the college.
Virginia Agricultural and Mechanical College.	None.
Hampton Normal and Agricultural Institute.	Connected with station.
West Virginia University	
University of Wisconsin, College of Arts.	

THE HATCH BILL.

[Approved March 2, 1887.]

AN ACT to establish Agricultural Experiment Stations in connection with the colleges established in the several States under the provisions of an act approved July 2, 1862, and of the acts supplementary thereto.

SEC. 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That in order to aid in acquiring and diffusing among the people of the United States useful and practical information on subjects connected with agriculture, and to promote scientific investigation and experiment respecting the principles and applications of agricultural science, there shall be established, under direction of the college or colleges, or agricultural department of colleges, in each State or Territory established, or which may hereafter be established, in accordance with the provisions of an act approved July 2, 1862, entitled, "An act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts," or any of the supplements to said act, a department to be known and designated as an "Agricultural Experiment Station:" *Provided,* That in any State or Territory in which two such colleges have been or may be so established, the appropriation hereinafter made to such State or Territory shall be equally divided between such colleges, unless the Legislature of such State or Territory shall otherwise direct.

SEC. 2. That it shall be the object and duty of said experiment stations to conduct original researches or verify experiments on the physiology of plants and animals; the diseases to which they are severally subject, with the remedies for the same; the chemical composition of useful plants at their different stages of growth; the comparative advantages of rotative cropping as pursued under a varying series of crops; the capacity of new plants or trees for acclimation; the analysis of soils and water: the chemical composition of manures, natural or artificial, with experiments designed to test their comparative effects on crops of different kinds; the adaptation and value of grasses and forage plants; the composition and digestibility of the different kinds of food for domestic animals; the scientific and economic questions involved in the production of butter and cheese; and such other researches or experiments bearing directly on the agricultural industry of the United States, as may in each case be deemed advisable, having due regard to the varying conditions and needs of the respective States or Territories.

SEC. 3. That in order to secure, as far as practicable, uniformity of methods and results in the work of said stations, it shall be the duty of the United States Commissioner of Agriculture to furnish forms, as far as practicable, for the tabulation of results of investigation or experiments; to indicate, from time to time, such lines of inquiry as to him shall seem most important; and, in general, to furnish such advice and assistance as will best promote the purposes of this act. It shall be the duty of each of said stations, annually, on or before the first day of February, to make to the Governor of the State or Territory in which it is located, a full and detailed report of its operations, including a statement of receipts and expenditures, a copy of which report shall be sent to each of said stations, to the said Commissioner of Agriculture, and to the Secretary of the Treasury of the United States.

SEC. 4. That bulletins or reports of progress shall be published at said stations at least once in three months, one copy of which shall be sent to each newspaper in the States or Territories in which they are respectively located, and to such individuals actually engaged in farming as may request the same, and as far as the means of the station will permit. Such bulletins or reports, and the annual reports of said stations, shall be transmitted in the mails of the United States free of charge for postage, under such regulations as the Postmaster-General may from time to time prescribe.

SEC. 5. That for the purpose of paying the necessary expenses of conducting investigations and experiments, and printing and distributing the results as hereinbefore prescribed, the sum of \$15,000 is hereby appropriated to each State, to be specially provided for by Congress in the appropriations from year to year, and to each Territory entitled under the provisions of section eight of this act, out of any money in the Treasury proceeding from the sales of public lands, to be paid in equal quarterly payments on the first day of January, April, July, and October in each year, to the treasurer or other officer duly appointed by the governing boards of said colleges to receive the same, the first payment to be made on the first day of October, 1887; Provided, however, that out of the first annual appropriation so received by any station an amount not exceeding one-fifth may be expended in the erection, enlargement or repair of a building or buildings necessary for carrying on the work of such station; and thereafter an amount not exceeding five per centum of such annual appropriation may be so expended.

SEC. 6. That whenever it shall appear to the Secretary of the Treasury from the annual statement of receipts and expenditures of any of said stations, that a portion of the preceding annual appropriation remains unexpended, such amount shall be deducted from the next succeeding annual appropriation to such station, in order that the amount of money appropriated to any station shall not exceed the amount actually and necessarily required for its maintenance and support.

SEC. 7. That nothing in this act shall be construed to impair or modify the legal relation existing between any of the said colleges and the government of the States or Territories in which they are respectively located.

SEC. 8. That in States having colleges entitled under this section to the benefits of this act, and having also agricultural experiment stations established by law separate from said colleges, such States shall be authorized to apply such benefits to experiments at stations so established by such States, and in case any State shall have established, under the provisions of said act of July 2 aforesaid, an agricultural department or experiment station in connection with any university, college, or institution not distinctively an agricultural college or school, and such State shall have established, or shall hereafter establish a separate agricultural college or school, which shall have connected therewith an experimental farm or station, the Legislature of such State may apply in whole or in part the appropriation by this act made, to such separate agricultural college or school, and no Legislature shall, by contract, express or implied, disable itself from so doing.

SEC. 9. That the grants of moneys authorized by this act are made subject to the legislative assent of the several States and Territories to the purpose of said grants: *Provided*, That payments of such instalments of the appropriation herein made as shall become due to any State before the adjournment of the regular session of its Legislature meeting next after the passage of this act shall be made upon the assent of the Governor duly certified to the Secretary of the Treasury.

SEC. 10. Nothing in this act shall be held or construed as binding the United States to continue any payments from the Treasury to any or all the States or institutions mentioned in this act; but Congress may at any time amend, suspend, or repeal any or all of the provisions of this act.

TABLE 55.—Statistics of Schools of Science Endowed with the National Land Grant for 1887-88.—PART I.

Location.	Name.	President.	Date of Charter.	Year of First Opening.	Professors and Instructors.		Students.						Endowed Professorships.	Fellowships.	State Scholarships.	Other Scholarships.		
					Preparatory Department.	College Department.	Total Number.	Preparatory Department.	Male.	Female.	Male.	Female.					Total Number.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
1 Auburn, Ala.....	State Agricultural and Mechanical College.	Wm. Le Roy Brown, A.M., LL.D.	1872	1872	.....	.....	12	14	0	151	0	7	0	172	0	22	0	0
2 Fayetteville, Ark.....	Arkansas Industrial University.	E. H. Murfee, A. M., LL. D.	1871	1872	.....	.....	28	.....	.....	67	18	.....	.....	303	138	11	.....	1,000
3 Fort Collins, Colo.....	State Agricultural College.....	Charles L. Ingersoll, M. S.	1877	1879	1	9	10	27	11	44	25	0	2	71	88	4	0	0
4 New Haven, Conn.....	Sheffield Scientific School of Yale University.	George J. Brush, LL. D., director.	1847	1847	0	31	31	0	271	0	271	0	20	0	291	81	23	1
5 Newark, Del.	Delaware College.....	Rev. John H. Caldwell, A.M., D.D.	1833	1834	0	5	5	0	0	17	0	0	0	17	0	2	.....	30
6 Lake City, Fla.....	Florida State Agricultural College.	F. L. Kern, A. M.....	1870	1871	.....	.....	8	17	0	19	0	.....	.....	36	0	0	0	.....
7 Cuthbert, Ga.....	Southwest Georgia Agricultural College. ^a	Bonj. T. Hunter, A. M.....	.....	1879	1	1	2	(29)	.....	(90)	0	0	.....	(119)	.....	.....	.....	.....
8 Dahlonega, Ga.....	North Georgia Agricultural College.	Wm. S. Bashinger, A. M.....	1871	1872	.....	.....	6	51	18	69	5	.....	.....	120	23	5	0	0
9 Hamilton, Ga.....	West Georgia Agricultural and Mechanical College.	Henry A. Hayes, A. B.....	1881	1882	.....	.....	4	.....	.....	.....	.....	.....	.....	70	48	.....	0	.....
10 Milledgeville, Ga.....	Middle Georgia Military and Agricultural College. ^a	General D. H. Hill, LL. D.	.....	1880	5	7	12	(293)	(146)	(146)	(3)	(442)	.....	.....	.....	.....	.....	.....
11 Thomasville, Ga.....	South Georgia College of Agriculture and the Mechanic Arts. ^a	L. S. MacSwain, A. M.....	.....	1879	.....	.....	3	(80)	(5)	(5)	0	0	(85)	.....	.....	.....	.....	.....
12 Urbana, Ill.....	University of Illinois.....	Selim H. Peabody, PH. D., LL. D.	1867	1868	.....	.....	29	89	14	213	56	3	2	305	72	20	0	0

^aStatistics of 1886-87.^a Statistics of 1885-86.

TABLE 55.—Statistics of Schools of Science Endowed with the National Land Grant for 1887-88.—PART I—Continued.

Location.	Name.	President.	Date of Charter.	Year of First Opening.	Professors and Instructors.			Students.								Endowed Professorships.	Fellowships.	State Scholarships.	Other Scholarships.	
					Preparatory Department.	Collegiate Department.	Total Number.	Preparatory Department.		Collegiate Department.		Resident Graduates.		Total Number.						
								Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
13 La Fayette, Ind.....	Purdue University.....	James H. Smart, LL. D.....	1862	1874	.....	.....	30	63	36	181	62	12	14	256	112	30	.....	.....	.....	.....
14 Ames, Iowa.....	Iowa Agricultural College.....	W. I. Chamberlain, LL. D.....	1862	1869	0	27	27	0	0	214	69	4	0	218	69	35	.....	0	.....	.....
15 Manhattan, Kans.....	Kansas State Agricultural College.....	Geo. T. Fairchild, A. M.....	1863	1863	0	22	22	0	0	312	153	0	0	312	158	23	.....	.....	.....	.....
16 Lexington, Ky.....	Agricultural and Mechanical College of Kentucky.....	Jas. K. Patterson, PH. D., F. R. S.....	1865	1866	4	9	13	88	25	168	45	.....	.....	256	70	5	.....	.....	400	.....
17 Orono, Me.....	Maine State College of Agriculture and the Mechanic Arts.....	M. C. Fernald, A. M., PH. D.....	1865	1863	0	10	10	0	0	119	4	8	0	127	4	29	.....	.....	.....	.....
18 Agricultural College, Md.....	Maryland Agricultural College.....	Henry E. Alvord, C. E.....	1856	1859	.....	8	8	9	0	40	0	0	0	49	0	7	0	0	23	0
19 Amherst, Mass.....	Massachusetts Agricultural College.....	Henry H. Goodell, A. M.....	1863	1867	0	12	12	0	0	105	0	8	0	113	0	19	0	0	80	14
20 Boston, Mass.....	Massachusetts Institute of Technology.....	Francis A. Walker, PH. D., LL. D.....	1861	1865	.....	.....	84	.....	.....	693	25	2	0	695	25	77	4	0	0	18
21 Agricultural College, Mich.....	Michigan State Agricultural College.....	Edwin Willits, A. M.....	1855	1857	0	20	20	0	0	234	19	1	0	235	19	37	0	0	0	0
22 Agricultural College, Miss.....	Agricultural and Mechanical College of Mississippi.....	Gen. S. D. Lee.....	1878	1880	.....	.....	17	108	0	173	2	3	0	284	2	25	0	0	.....	.....
23 Rodney, Miss.....	Alcorn Agricultural and Mechanical College.....	John H. Burrus, A. M.....	1871	1872	3	4	7	185	8	42	3	.....	.....	227	11	6	0	0	0	0
24 Rolla, Mo.....	Missouri School of Mines and Metallurgy (University of Missouri).....	S. S. Laws, LL. D., president; W. H. Echols, B. Sc., C. E., director.	1870	1870	2	3	5	.....	.....	.....	.....	.....	.....	50	0	0	0	0	0	0

25	Hanover, N. H.....	New Hampshire College of Agriculture and the Mechanic Arts, Rutgers Scientific School.....	Charles H. Pettoe, A. M., c. E., dean.	1865	1868	0	9	9	0	0	33	0	0	0	33	0	5	0	0	24	22
26	New Brunswick, N. J.....	Merrill E. Gates, Ph. D., L.L. D., L. H. D.	1865	0	15	15	0	0	84	0	1	0	85	0	1	0	40
27	Ithaca, N. Y.....	Cornell University	C. K. Adams, LL. D.....	1865	1868	0	79	79	0	0	(913)	52	835	102	139	2	.....	512	36	.....
28	State College, Pa.....	Pennsylvania State College.....	George W. Altherton, LL. D.	1854	1859	20	64	13	78	12	0	0	142	25	7	0	0	0	50	0	
29	Orangeburg, S. C.....	Clafin University b.....	Rev. L. M. Dutton, A. M., D. D.	1872	1872	.....	11	125	54	17	1	.....	c 142	455	3	0	0	0	0	0
30	College Station, Tex., State Agricultural and Me- chanical College of Texas.	State Agricultural and Me- chanical College of Texas.	Louis L. McNitts, A. M., chairman of faculty.	1871	1876	0	17	17	0	0	211	0	3	0	214	0	16	.....	.....	.....
31	Blacksburg, Va.....	Virginia Agricultural and Me- chanical College.	Gen. L. L. Loumax.....	1872	1873	1	9	10	10	0	140	0	2	0	152	0	1	.....	152	0
32	Hampton, Va.....	Hampton Normal and Agri- cultural Institute.	Gen. S. C. Armstrong.....	1870	1893	.....	51	.....	.....	.....	.....	.....	.....	(c) (p)	.....	.....	.....	.....	.....	.....

NOTE.—The State Agricultural College at Corvallis, Oregon, gives no statistics for 1887-88. The president states that this is its first year as a separate institution.
^a Does not include 31 students in School of Mechanic Arts.
^b Department of the University of South Carolina.

^c Does not include 746 students in grammar school.

TABLE 55.—*Statistics of Schools of Science Endowed with the National Land Grant for 1887-88.*—PART II.

	Name.	2	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
1	State Agricultural and Mechanical College	1	4	2,500	\$5	\$5	0	\$125	\$6,000			\$252,000	\$20,280	\$12,500	\$19	\$11,500	0
2	Arkansas Industrial University	1	4	4,000	10	10	0	0	12,731			130,000	10,400	30,000	1,100	23,000	0
3	State Agricultural College	1	4	1,500	0	0	0	0	10,000			55,000	1,500	24,000	*28,610	*81,943	0
4	Shelburne Scientific School of Yale University	3	3	6,000	10	10	150	0	0			*160,989	*11,762	0	0	0	0
5	Delaware College	4	4	4,000	5	5	0	130	4,000	4,000	70,000	83,000	4,980	6,000	0	4,980	0
6	Florida State Agricultural College	2	4	1,000	0	0	0	0	4,000	4,000	40,000	153,000	12,240	2,000	575	18,420	0
7	Southwest Georgia Agricultural College	2	4	1,000	5	5	0	100	500	500	30,000	500	500	2,500	0	2,575	0
8	North Georgia Agricultural College	2	4	1,000	0	0	0	100	500	500	30,000	500	500	2,500	0	4,000	0
9	West Georgia Agricultural and Mechanical College	4	4	3,000	0	0	0	100	10,000	10,000	10,000	10,000	12,000	0	0	12,000	0
10	Middle Georgia Military and Agricultural College	1	4	17,000	10	10	0	125	60,000			450,000	23,864	23,962	69,611	62,070	0
11	South Georgia College of Agriculture and the Mechanic Arts	1	4	4,800	5	5	0	140	50,000			340,000	17,000	24,000	65,000	46,000	0
12	University of Illinois	1	4	8,500	0	0	0	97	60,000			641,556	60,000	9,000	0	60,000	0
13	Purdue University	4	4	7,454	0	0	0	140	80,000			501,436	32,000	17,829	6834	52,725	0
14	Iowa Agricultural College	4	4	5,000	0	0	0	140	10,000			160,000	9,900	24,000	2,700	36,600	0
15	Kansas State Agricultural College	2	4	5,000	0	0	0	125	17,500			165,000	11,500	14,050	3,000	43,550	0
16	Agricultural and Mechanical College of Kentucky	2	4	5,000	0	0	0	180	2,000			231,300	11,500	14,050	3,000	43,550	0
17	Maine State College of Agriculture and the Mechanic Arts	1	4	2,500	0	0	0	180	7,885			115,913	6,142	0	0	7,142	0
18	Maryland Agricultural College	1	4	7,400	0	0	0	180	2,000			233,840	360,000	29,000	640	20,605	\$1,000
19	Massachusetts Agricultural College	2	4	7,400	0	0	0	180	2,000			233,840	360,000	29,000	640	20,605	\$1,000
20	Massachusetts Institute of Technology	2	4	7,400	0	0	0	180	2,000			233,840	360,000	29,000	640	20,605	\$1,000
21	Michigan State Agricultural College	2	4	7,400	0	0	0	180	2,000			233,840	360,000	29,000	640	20,605	\$1,000

	2	4	2,835	5	0	0	.....	17,527	159,598	98,575	4,929	17,588	0	22,517	0
22 Agricultural and Mechanical College of Mississippi.															
23 Alcorn Agricultural and Mechanical College.	4	4	3,006	11	.....	715	61	300	.....	113,575	5,679	3,821	45	9,875	0
24 Missouri School of Mines and Metallurgy (University of Missouri).	2	3	800	0	0	20	135	.....	65,000	.....	.....	7,500	.....	7,500	.....
25 New Hampshire College of Agriculture and the Mechanic Arts.	.....	4	.....	0	2	30	110	1,000	67,500	105,900	7,873	3,090	0	10,873	0
26 Rutgers Scientific School.	.....	4	23,000	5	71	75	160	8,000	.....	115,000	6,960	0	.....	20,000	.....
27 Cornell University.	.....	4	92,000	.....	5	75	200	438,314	922,235	4,282,042	951,621	.....	39,650	201,271	61,500
28 Pennsylvania State College.	2	4	4,500	0	0	0	160	12,500	400,000	500,000	30,000	112,000	0	147,500	.....
29 Chalmers University.	4	4	1,500	.....	3	3	50	1,500	60,000	0	.....	17,700	2,000	20,000	500
30 State Agricultural and Mechanical College of Texas.	.....	4	2,000	5	5	0	130	20,000	214,062	200,000	14,290	20,000	.....	33,280	.....
31 Virginia Agricultural and Mechanical College.	1	4	2,000	5	.....	0	73	3,025	96,865	314,312	20,659	12,000	0	23,376	.....
32 Hampton Normal and Agricultural Institute.	2	3	5,500	.....	.....	0	98	.....	450,000	157,941	6,618	10,329	.....	101,829	.....

d To non-residents.

c Includes \$15,000 for experimental station.

b Incidental fees.

* Statistics of 1895-97. a Statistics of 1895-96.

List of Agricultural and Mechanical Colleges whose Work cannot be separated from that of the State Universities of which they are Departments. (See Table 49.)

Location.	Name.
Berkeley, Cal.....	College of Agriculture, Mechanics, Mining, Engineering, and Chemistry (University of California).
Athens, Ga.....	Georgia State College of Agriculture and Mechanic Arts (University of Georgia).
Baton Rouge, La.....	Louisiana State University and Agricultural and Mechanical College.
Minneapolis, Minn.....	College of Agriculture and Mechanic Arts (University of Minnesota).
Columbia, Mo.....	Missouri Agricultural and Mechanical College (University of Missouri).
Lincoln, Nebr.....	Industrial College of the University of Nebraska.
Reno, Nev.....	University of Nevada.
Chapel Hill, N. C.....	Agricultural and Mechanical College (University of North Carolina).
Columbus, Ohio.....	Ohio State University.
Providence, R. I.....	Agricultural and Scientific Department of Brown University.
Columbia, S. C.....	South Carolina College of Agriculture and the Mechanic Arts (University of South Carolina).
Knoxville, Tenn.....	University of Tennessee and Agricultural and Mechanical College.
Burlington, Vt.....	University of Vermont and State Agricultural College.
Morgantown, W. Va.....	Agricultural Department of West Virginia University.
Madison, Wis.....	College of Arts (University of Wisconsin).

The details presented in Tables 52 to 55 make a very full exhibit of the actual work and resources of the land-grant colleges for the current year. They suggest also the varied development of the institutions as determined by locality and resources. The year has, however, been characterized by great activity in respect to many particulars that do not admit of tabular presentation. Information concerning these compiled from reports, catalogues, and other official sources is embodied in the following statements:

Cornell University, which has the largest endowment of any of the land-grant colleges, and is one of the five richest foundations in the country, embraces a full classical and scientific curriculum corresponding to that of the arts colleges in general; five technical courses, graduate courses, and two professional schools. The ample endowment and full equipment of this university, the ability of its faculty, and the scholastic standards maintained, justly entitle it to rank among institutions of the highest order.

Place has been given to it in the special tabulation of foundations comprising groups of faculties or schools. It should be observed, however, that while Cornell consists of schools and colleges bearing distinct names and having distinct functions, as the "Sibley College of Mechanical Engineering and Mechanical Arts," "The College of Agriculture," etc., the students are not matriculated in schools, but are grouped for certain studies, and are under the general direction of a single faculty. To this arrangement the school of law is an exception.

The libraries of the university are three in number: The General University Library, containing 62,000 volumes; the President White Library of History and Political Science, 30,000 volumes, and the Law Library, 4,500 volumes.

The additions to the equipment reported for the present year are seven thousand five hundred dollars from the Hon. Hiram Sibley for Sibley College; eight thousand from Hon. Henry M. Sage, to equip the department of Greek; forty-five thousand from A. S. Barnes, Esq., for Christian Association Hall, and one thousand from Mrs. A. S. Barnes for Shakespeare prize.

LAND-GRANT COLLEGES WHOSE CURRICULA INCLUDE A CLASSICAL COURSE.

Omitting Cornell University, the remaining institutions here considered present a variety of educational schemes, combining general and technical courses in diverse proportions. Six of the number report classical courses leading to the degree of A. B. Among these is the University of Illinois, one of the richest and most highly organized of the land-grant colleges.

Its endowment from the land grant was increased at the first by donations of property by Champaign County valued at above four hundred thousand dollars, and has been further augmented by large appropriations from the State of Illinois.

Successive colleges and schools have been added as required until four colleges, including eleven distinct schools, have been organized.

The present productive fund of the university is exceeded only by that of one other institution in the State, and the value of its property and scientific apparatus by none.

Its domain comprises 623 acres, including stock farm, experimental farm, orchards, nurseries, etc. The buildings are fifteen in number, all appropriated to scholastic purposes, as the university makes no provision for boarding and lodging students. Among

noticeable features in the equipment are the art gallery and the museum of industrial art.

The faculty is large and efficient. The proportion of students taking the classical course has always been small; this year it is less than two and a half per cent. of the entire number.

The remaining land-grant colleges reporting an A. B. course are as follows: Arkansas Industrial University, Delaware College, Southwest Georgia and North Georgia Agricultural Colleges, and the Agricultural and Mechanical College of Kentucky.

These colleges, it will be seen, are in the section of the country in which the movement for scientific and technical training is of recent origin. In common, however, with the other land-grant colleges of the same section they have felt the impulse of the movement, and are making provision for courses in theoretic and applied science as rapidly as circumstances permit.

The trustees of *Arkansas Industrial University* endeavored, from the first, to withstand the prejudices which they encountered against non-classical colleges, and have not ceased to urge upon the State Legislature the need of enlarged appropriations to supply the material appliances for scientific and technical instruction. In 1835 their efforts were seconded by the joint committee of the Legislature; nevertheless that body, as it appears from the report of the trustees for 1836, "limited the appropriations for the two years ending June, 1837, to the estimates submitted for continuing the system of instruction, upon the basis which had been followed substantially from the opening of the institution, namely, the usual curriculum of literary colleges."

In their report for 1836 the trustees say:

"The board, although anxious to take the responsibility and meet the manifest wishes of a majority of the citizens of the State in the matter mentioned, were thus left without adequate means to effect these much-desired reforms. However, they determined to make an effort, and in reorganizing the scientific departments prepared courses of instruction that could be practically utilized in the direction sought.

"By close calculation they were enabled to divert a portion of the general fund at their command and organized, on a limited scale, a manual training school for boys, which they feel satisfied, as far as it has been developed, fully justifies their efforts in that direction. * * * Underlying this department, and as a basis for its future development, a course of free-hand and mechanical drawing was established, and a branch of industrial art for girls connected therewith, and the board feels gratified with the results of this work as far as the limited experiment has been carried."

The report for the present year states that, "in order further to emphasize the agricultural and mechanical departments, the late Legislature, in what is known as the Barker bill, while making a handsome appropriation to each of these leading departments, ordained that all male beneficiaries should pursue one of these courses, restricted the subjects to be taught to beneficiaries, and fixed the number and character of the professorships. The evident design of the Legislature was to respond to the demands and needs of the State, by creating an agricultural and mechanical institution, with such subsidiary courses as the amount of the appropriation would allow. The present board of trustees and faculty of the institution, aware of the necessities of the State, and fully in accord with the policy outlined by the Legislature, have done all in their power, in laying out the appropriation and drawing up the courses of study, to meet the wants, both of the great mass of the people of the State, as well as the minority also, in a subsidiary way. We are fully persuaded that the agricultural and mechanical courses here offered and the facilities afforded by the legislative appropriations will enable us to turn out graduates in these departments that will compare favorably with those of any other school, while at the same time, with little or no additional cost to the State, strong classical and normal courses have been laid down."

LAND-GRANT COLLEGES OFFERING ONLY SCIENTIFIC AND TECHNICAL COURSES.

Twenty-one of the colleges included in Table 55 confine their curricula to scientific and technical courses. The law of supply and demand as affecting the practical character of their work is strikingly illustrated by the recent history of the *Alabama State Agriculture and Mechanical College*. Under the impulse communicated by the development of the rich mineral resources of the State and the sudden expansion of mining and engineering interests within its borders, the college has become a "distinctive school of industrial science or polytechnic institute." Its present organization and equipment were fully described in the Commissioner's Report for 1836-37. The building operations, which, as mentioned in that Report, were begun immediately after the disastrous fire of June 24, 1837, have been vigorously prosecuted. The interest manifested in the work makes it certain that appropriations sufficient for its completion upon the present plans will be forthcoming.

SHEFFIELD SCIENTIFIC SCHOOL.

Recent events in the history of the *Sheffield Scientific School* have brought to light some interesting particulars as to the work of the school, and as to the popular demand for the special instruction for which the Congressional grant was designed to make provision.

In his report for 1887, already quoted, President Dwight, referring to these events, says: "As the result of a misapprehension on the part of some persons as to the exact meaning and intention of the Congressional act of 1862, under which the Legislature of the State of Connecticut gave to the Sheffield Scientific School the income of the fund obtained from the sale of the land scrip which fell to the share of this State, a question was brought before the Legislature, at its session in 1886, as to the propriety of continuing the payment of this income to the school and the possibility of discontinuing it. After a careful examination into the whole subject by a committee of the Legislature, which made its report in 1886, and a full hearing of all parties concerned by another committee in 1887, the Legislature adopted, on the 30th of March in the present year, the following resolution:

"Resolved by this Assembly, That the act entitled an act appropriating to the Sheffield Scientific School of Yale College the proceeds of land assigned to the State by act of Congress approved July 2d, 1862, passed by the General Assembly of Connecticut at the May session of 1863, and approved June 24, 1863, and the agreement of the President and Fellows of Yale College, executed in accordance with the provisions of said act, together constitute a binding contract inviolably securing to said corporation the income of the fund provided for in said act so long as said corporation shall continue on its part to comply with the terms and conditions of said contract."

This resolution was passed by the Legislature without any dissenting voice and was approved by the Governor of the Commonwealth. It is a matter of gratification to the president and fellows, also to the governing board of the school, that the thorough and careful review of the whole subject by the highest authorities of the State, has thus set aside all temporary misunderstandings of the case, and that the contract between the State and the president and fellows has been reaffirmed.

From the annual statement of the governing board of the school for 1886, it appears that the sum realized by Connecticut from the sale of its scrip was \$135,000. By the terms of the contract between the State and Yale College, devoting to the latter the interest of this fund, gratuitous instruction must be furnished by the school to such a number of students from the State as would expend a sum equal to one-half the interest for the year in paying for their instruction were they charged the regular rates. The school has not only acted up to this requirement, but has generally had on its rolls for gratuitous instruction a larger number of State scholars than the complement. With respect to the class of students who have sought the benefit of the provision, the report of the governing board says: "Neither in the studies related to agriculture or the mechanic arts was there at first any wide-spread demand, apparently, for the instruction furnished. Nor need it be denied that in the case of the former this indifference has largely continued. The same causes which have operated to prevent large numbers from pursuing the scientific study of agriculture in every other State have operated here also. Every careful observer sees what they are; they do not need to be discussed in this place. They will become less and less influential with the progress of time, but it will be long before they cease to exert great influence. The result has most certainly been that the school has had but few students who cared to devote themselves to the special study of the science of agriculture.

"But Connecticut is likewise a great manufacturing State. It was not long before the advantages here presented came to the knowledge of the young men who wished to acquire scientific training in subjects related to the mechanic arts. The number of applicants from this source increased rapidly, and speedily took up every free scholarship to which the State was entitled."

A subject of special interest has recently been pressed upon the attention of the governing board; namely, "The addition of a fourth year to the course of study, so as to make the course required for the attainment of the degree of bachelor of philosophy cover the period of four years instead of three, as at present." With respect to this proposition, President Dwight observes: "It would place the degree of bachelor of philosophy, in respect to the matter of time, in the same position as that of bachelor of arts." It is felt by many of the wisest and most thoughtful men in the university, both in the school itself and outside of it, that this addition of a fourth year would be a very desirable addition. A large proportion of the graduates of the school also, as it is believed, are disposed to hope for the addition, and to favor it as soon as the funds at command may render it practicable. After very careful consideration of the subject, however, it is the opinion of the director of the school and of his associates in the governing board—an opinion in which the president concurs—that, in order to a successful meeting of the

demands in the way of additional instructors and other necessary means to the end, a sum of at least two hundred and fifty thousand dollars would be needed, and that, until the funds can be increased by this amount, it would not be in accordance with the best wisdom to make this change. The end is a desirable one, but the movement towards it should be sure and safe. In connection with this prolongation of the course of study, or even before it shall be realized, and as preparing the way for it, the addition of further laboratories and lecture-rooms, already alluded to, will be very desirable, and even essential.

George J. Brush, director of the Sheffield Scientific School, makes the following statement as to its status:

"The Sheffield Scientific School is a part of Yale University, having the benefit to a greater or less degree of its libraries, scientific apparatus, grounds, buildings, etc., and it is under the general management of the president and fellows of the university. The State of Connecticut gives us the income derived from the amount realized from the sale of lands granted by Congress in 1862; this income is now \$6,750 each year. We maintain in the Sheffield Scientific School sixteen (16) professors who devote their whole time to its interests, and besides we employ fifteen other instructors in various subjects taught in the school. This year the amount paid out for salaries of professors and instructors in the Sheffield Scientific School will be \$57,550, and our general expenses amount to about \$7,000, making a total of over \$64,000; and that does not include the cost of management and maintenance of the libraries and museums of the university, the advantages of which we share in common with other departments of the institution."

The *Agricultural and Mechanical College of Mississippi* was opened in 1880. From the beginning the board of trustees determined to make all instruction subserve the leading object defined in the land-grant act, viz, the "promotion of agriculture and the mechanic arts."

Recognizing that the former was, and for many years must continue to be, the main interest of the State, and seeing "the needs of an improved system of agriculture," they concentrated their efforts first of all upon the agricultural department.

The success of the college upon the plan indicated gives particular interest to the report of its operations.

In addition to the college building, professors' houses, etc., the college possesses a well-stocked farm of about two thousand acres, chemical laboratory, and valuable scientific apparatus.

Instruction in the department of agriculture embraces the lectures of the class-room and the "knowledge gained by the student in the regular work of the field and in an intimate association during his whole course with the large and well-equipped farm." The college provides for the student not merely experiment work, but a business farm. He not only has the advantages offered by an experimental farm, but he helps "to cultivate crops varying in extent from ten to one hundred or more acres."

A special course in dairy husbandry is provided, with facilities for practical work in the creamery.

In the department of horticulture instruction is also carried on by lectures and garden work.

In their report, dated July 6, 1887, the trustees state that "the real productive value of the farm has about doubled. This farm has not received a cent from the college fund in three years and annually clears a profit which has been invested in improvements and stock.

"For the support of the college for the years 1886 and 1887, the Legislature appropriated \$50,000; for these two years the college share of the interest on the land-scrip fund was \$9,857; total receipts for the two years \$59,857, making for each year \$29,928, in round numbers \$30,000. During that time the college had 691 students in attendance. Many were turned away in 1886 for want of room to lodge them, and in 1887 as many were turned away as were received, for the same reason."

The actual annual expenses of a student attending the college are estimated at \$124.10, excluding all clothing save the uniform. In the Sophomore year this amount is increased by \$12 for chemicals. This amount may be reduced by the labor of the student. The annual cost to the State for each student exclusive of the amount paid them for labor is estimated at \$232.46.

The trustees find upon inquiry that about fifty-six per cent. of those who have attended the college are engaged in farming.

The land-grant colleges in the group of States formed out of the North-West Territory, with those of Iowa and Kansas, have given special prominence to the agricultural and industrial features contemplated in the land-grant act. The reports of successive years show continuous progress in these respects. As facilities for preparatory instruction are multiplied, the colleges are relieved of elementary work.

Iowa Agricultural College makes a report to that effect the present year, the preparatory class having been discontinued in 1887.

The *Michigan Agricultural College* is enlarging its facilities in the direction of the mechanic arts without diminishing at all the strength of its agricultural department.

Experimental work for the promotion of agriculture and horticulture has been from the first a prominent feature in its course of training. Extensive laboratories in the different departments enable the institution to enter on a series of experiments "to be prosecuted systematically and continuously from year to year. The results of these experiments are published in the monthly bulletins and in the annual report of the State Board of Agriculture."

Purdue University, La Fayette, Indiana, under the vigorous presidency of Dr. James H. Smart, maintains the standards which have placed it among the leading institutions of its class in the country.

The agricultural and mechanical departments are here equally developed. In the former the endeavor is to give complete instruction in the sciences underlying agriculture, to incite students to make original investigations in those sciences, and to afford them opportunity for witnessing and conducting experiments in every department of agriculture directed to the improvement of its processes and the increase and improvement of its products. The appliances for this part of the work include a well-managed farm, experimental field, orchard, greenhouse, cabinet collections, and laboratories.

The mechanical shops of *Purdue University* are among the best in the country. As an evidence of the practical character of their work, may be mentioned the recent construction of forges and other equipment for the new shops of the *Alabama Polytechnic*.

Two States of the South Atlantic section, viz, *Maine, Massachusetts, and Virginia*, and three of the North Atlantic, viz, *Maine, Massachusetts, and Pennsylvania*, have established distinct colleges of agriculture on the land-grant fund.

The chemical department of the *Maryland College* has been recently thoroughly reorganized and supplied with new quarters and equipment.

The *Pennsylvania State College* offers three general and six technical courses. The former include a general course in agriculture adapted to the wants of those who wish to begin the study of the subject immediately after leaving the public schools. The technical course in agriculture makes full provision for instruction in the sciences related to that art, including laboratory work and experimental work on the farm, orchard, vineyard, etc. Notwithstanding the excellence of the course and the very complete facilities for its maintenance the number of students entering this department is small.

The *Massachusetts Agricultural College, Amherst*, reports a year of exceptional prosperity.

In the matter of instruction, the experiment was made of inviting gentlemen not connected with the college to lecture on special topics, the lectures being followed by a general discussion, in which the students participated. Of thirty lectures delivered in this way, fifteen had direct reference to farm, garden, and dairy matters. The remainder were on subjects of general science.

An interesting event in the recent history of the college was the celebration, June 21, 1887, of the twenty-fifth anniversary of the passage of the land-grant act. Commemorative addresses were made by Dr. Charles Kendall Adams, president of *Cornell University*, by Hon. Charles G. Davis, and by Hon. Justin S. Morrill, to whom the country is indebted for the passage of the land-grant act.

The report of Dr. Francis A. Walker, president of the *Massachusetts Institute of Technology*, for the current year is replete with valuable information and suggestion.

The fifty-eight graduates who received the degree of B. S. in May, 1887, found easy admission into the several industrial professions. Dr. Walker says:

"In either chemistry or civil engineering it would have been practicable to place twice as many men as were available in eligible professional positions between the close of the past and the opening of the present year. So great was the demand for members of the graduating class that it was for the first time found impracticable to fill all the vacant assistantships in the several laboratories from our own numbers, and we were obliged in two cases to send to other institutions for men to take these positions, and, in a third case, to appoint one of our special students, not a graduate."

The opening of the school year of 1887-88 witnessed large additions to the number of students, the aggregate being 819 as against 738 the previous year. Omitting, as is usual, the students of the *Lowell School of Practical Design* and the students of the *High School of Mechanic Arts*, the number is 720, as against 637 the previous year. As compared with 1877-78 the increase in number of students is above two hundred and seventy per cent.

"If this remarkable increase," observes President Walker, "had been secured by any lowering of the standard of scholarship, any surrender of the requirements for admission, for continuance in the school, or for graduation from it, that increase of

numbers would not be to me a subject of pride or pleasure; but when I consider that this increase, to nearly fourfold the number nine years ago, has taken place coincidentally with a steady advance in scholarship; that these great bodies of students have come to us well knowing that the Institute is a place for hard study, and cheerfully accepting the conditions which we impose; this, I confess, appears to me a proper subject for congratulation. Not only so, but this readiness and eagerness on the part of so many young men to undertake severe and protracted courses of study, regarding which there can be no pleasing illusions, and which require the entire devotion of time and thought and strength for four years, affords a most gratifying indication of the essential manliness of young men.

"Our experience, at least, furnishes no support to the view that, in order to make a school popular, the requirements for admission or continuance must be placed low, or, if the theoretical standard be high, administrative concessions must be freely made to the spirit of indolence or frivolity, or to the demands of sport or of society. Not only is it true that students, in increasing numbers, come to the Institute in spite of its reputation for hard work, but it is not less conspicuously true that, within the Institute, the students, by a very decided preference, select those courses which are recognized as involving the greatest amount of study and practice. It is also true that within the several courses those options which offer the largest capabilities are those most generally chosen."

Of the total number of students 59.6 per cent. are from Massachusetts, 13.6 per cent. from other New England States, and the remaining 26.8 per cent. from outside New England.

As regards the ages of students upon entrance, the average for the present year is found to be eighteen years five months and seventeen days.

For several years there has been a steady advance in this respect, concerning which President Walker observes:

"This must be regarded as a proper subject of congratulation, when consideration is had of the nature of the work at the Institute, and the immediate entrance which it affords into professional practice.

"It is true that the postponement of the age of entrance has of late caused some apprehension on the part of those who direct the classical colleges of New England, and that serious consideration has been given to various proposed means of meeting this tendency, but their problem is not our problem. In the case of students graduating from classical colleges, there is generally to follow a course of two or three years in professional schools, whether of law, of medicine, or of divinity, which is in turn to be followed by a longer or shorter period—sometimes a long and weary one—of waiting for professional practice. Under these circumstances it is undoubtedly a hardship that the age of graduation with the Bachelor's degree should be postponed beyond the twenty-first, much more beyond the twenty-second, year of life. It is unquestionably true that a young man who commences the full, busy practice of his profession before he is twenty-five years of age has an advantage over one commencing at a later period in the matter of freshness, spontaneity, hopefulness, and enthusiasm.

"In our case the relations of instruction to professional practice are altogether different. A young man who has pursued one of our courses with credit may, if he pleases, enter into the practice of his profession the day after he graduates, often with a choice among several positions offered him. In these circumstances graduation at twenty-two years must be regarded as more fortunate than graduation at an earlier period, while twenty-three or twenty-four years can not be considered as in any sense excessive."

The teaching staff of the institute continues to increase, numbering seventy-five members as compared with sixty-nine in 1886-87. The increase during the decade has been 76 per cent.

By reference to Table 55, Column 31, it will be seen that the productive fund of the Institute is exceeded by that of eight other colleges there tabulated.

In the report for 1886 the president stated that it would require half a million of dollars for immediate and imperative needs, and that it would take a million to place this institution in as good a financial condition as the poorest school of its rank in the United States.

During the present year one hundred thousand dollars have been received by bequest of Richard Perkins, Esq.

The appeal to the Legislature for two hundred thousand dollars was met with the appropriation of half the sum, coupled with two conditions: first, that one hundred thousand dollars from other sources should be added to the funds of the Institute prior to first payment to be made from the treasury, and secondly, that twenty free scholarships should be established and maintained in the Institute upon specified terms.

The first condition has been complied with, largely through the devoted and self-sacrificing labors of Mr. William Endicott, Jr.

The second condition it was found would impose too heavy a burden upon the finances of the school; it therefore seemed best to the executive committee and the finance committee not to draw the first instalment of the State grant until further efforts shall be made to secure the grant of the additional one hundred thousand dollars asked for.

"Should this be secured," says President Walker, "the Institute of Technology will, for the first time, be in a condition to meet its current expenses out of its annual receipts. Such a result would not avoid the necessity for large additional endowments—first, to secure the school against calamity or reverses of fortune; and, secondly, to provide for a continuous future enlargement and improvement of its various services and departments, to meet the ever-growing demands for technical instruction; but it would mark a very important epoch in the history of the Institute of Technology, and would bring an unspeakable relief to the officers and teachers who have so long in penury and straitness of means held up the standard of scientific instruction here amid difficulties and discouragements neither small nor few."

DEPARTMENTS OF STATE UNIVERSITIES ENDOWED WITH THE LAND GRANT.

The fifteen departments of State Universities or other institutions that have received the benefits of the land grant, like the independent colleges of the same class, show various stages and kinds of development. In every case, however, there is the evident intention to carry out the purpose of the act as completely as possible under the existing conditions.

While experience seems to indicate that technical training is most successfully pursued in schools organized for that special work, it is certain that the scientific departments endowed by the land grant are proving themselves to be invaluable agencies for the promotion and diffusion of scientific knowledge and for the training of teachers, investigators, and scientific specialists.

It is further noticeable that in several instances the departments have developed into highly specialized schools in which the industrial applications of science have full representation. This is emphatically the case with the *Rutgers Scientific School*, a department of Rutgers College, New Brunswick, N. J. This school offers the following courses of study: A course of four years in civil engineering and mechanics; a course of four years in chemistry and agriculture; a special course of two years in agriculture; and post-graduate courses. Abundant provision is made for laboratory, farm, and field work.

The *University of Nebraska* includes an "Industrial College," with courses in agriculture and civil engineering. Plans for a veterinary school have also been formed.

The *scientific department* of the *University of California* embraces five colleges, as follows: College of Agriculture, of Mechanics, of Mining, of Civil Engineering, of Chemistry.

Each of these is abundantly supplied with laboratories and other material appliances for instruction.

In addition to the ample provision for observation and practice possessed by the colleges themselves, the opportunity afforded by the great industrial resources and enterprises of the State are made available to the student by organized visits of inspection.

The United States Coast and Geodetic Survey, the surveys and operations of United States engineers in the harbors of the coast, and the extensive works of the hydraulic mines are all used for illustration and instruction.

The *University of Minnesota* has been specially mindful of the provisions of the land grant in its application of the fund.

With respect to agriculture, the report of the regents for 1887-88 states that the board has, "in good faith, from the first, made ample provision to teach such branches of learning as are related to agriculture, and has established a course known as that of the college of agriculture. It is not to be disguised that this course has not been valuable to the industry for which it was intended, but for what reason it is not necessary here to consider.

"Yet, while very few have pursued this course and taken its degree, it would be unjust to assume this as the measure of the contribution which this university makes to agriculture as compared with other institutions known only as agricultural colleges, inasmuch as the subjects of English, mathematics, and the natural sciences, which in the latter are accredited to the agricultural course, are in our university pursued as thoroughly in either of its several courses. Hence we may in fairness ask the friends of agriculture to examine the generous provisions made for the departments of natural history, botany, and geology in the museum and science hall, the last building erected by special appropriation of the Legislature."

The college of mechanic arts has been highly prosperous. "A course in electrical engineering leading to the degree of bachelor of electrical engineering was added at the

beginning of the year 1887-88; the artisans' training school was reorganized and named 'the school of practical mechanics and design;' a new course in the care and management of engines and boilers was added; also a new course in designing and wood carving."

The *University of Wisconsin* has become a recognized force in the promotion of all the various industries of the State. The president reports that "A chair of agricultural physics has been recently established and work inaugurated in it. This chair contemplates both instructional and experimental work, and will constitute a factor of both the agricultural college and the experiment station. This important department of agricultural science has not received the definite recognition which it unquestionably merits, this being the first chair of this kind, so far as known, yet specifically established." The report further states that "the new science buildings have been completed and now afford accommodations unsurpassed in most respects, quite unequalled in some particulars." "Large invoices of physical engineering and other apparatus, very carefully selected from the most approved manufactories, have been received. Typical collections representative of mineralogy, petrography, geology, zoölogy, and botany have been purchased. Judicious selections of laboratory manuals and treatises essential for reference have been purchased for the laboratories."

"One of the most important phases of the recent growth of the university has been the developments of the departments of original investigation and the more explicit recognition of research and of the dissemination of new and more accurately determined knowledge as one of the important functions of the University. The two departments, the Washburn Observatory and the Agricultural Experiment Station, which are devoted almost exclusively to the increase of knowledge, have been provided with additional force and facilities and research has become a factor in several of the other departments."

Nine fellowships have been recently established. "One of these has been founded by the generosity of the Hon. John Johnston, of Milwaukee, in the appointment of candidates to which preference is given to residents of Milwaukee County and to those exhibiting ability and promise in the departments of mechanic arts."

REMARKS ON TABLE 56.

Table 56 presents the summarized statistics of thirty schools of science not endowed with the land-grant act.

Four institutions or departments which formerly appeared in this category are not included in the present table. These are the Industrial Institute and College for Women, Columbus, Miss., which has been transferred to Table 44; the John C. Green School of Science, a department of the College of New Jersey; the Scientific Department of the University of the City of New York; and the Pardee Scientific Department of Lafayette College, whose statistics were not reported separately from those of the foundations to which they belong (Table 49).

The Chaffey College of Agriculture, Ontario, Cal., which did not report in 1886-87, appears in the table for the present year; also the Technical School of Cincinnati, Ohio, which was established in 1886.

The twenty-eight schools reporting both this year and last show an increase of nineteen instructors and one hundred and twenty-nine students. Appropriations to the same show an increase of \$17,065. Benefactions amounting to \$40,465 were received by eight of the schools, as against \$35,260 in 1886-87 distributed among six schools.

The total income so far as reported, viz, \$547,253, represents twenty-two schools. In the case of schools not giving the total income it has been assumed that the sum of items reported in answer to any of the inquiries relative to income would be the total. Of the entire amount tabulated, 12.7 per cent. were derived from productive funds, 42.31 per cent. from State or municipal appropriations, 16.86 from tuition fees, and 28.13 per cent. not specified.

The schools here classed together differ materially in respect to courses and standards of instructors and general aims. For a particular characterization of each the reader is referred to the Commissioner's Report for 1886-87.

TABLE 56.—Summary of Statistics of Schools of Science not Endorsed with the National Land Grant for 1887-88.

States and Territories.	Professors and Instructors.				Students.				Number of Degrees Conferred in Course in 1887-88.	Number of Endowed Professorships.	Number of Fellowships.	State Scholarships.	Other Scholarships.	Number of Volumes in Libraries.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for Year from Productive Funds.	Amount of State or Municipal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.
	Number in Proprietary Department.	Number in Collegiate Department.	Total Number.		Number in Proprietary Department.	Number in Collegiate Department.	Number of Resident Graduates.	Total Number.														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
California.....	1	1	0	6	90	0	0	90	0	0	0	0	0	500	\$12,000	\$58,000	\$50,000	\$1,000	\$24,000	\$2,200	\$8,200	0
Colorado.....	1	1	0	6	6	0	1	46	4	0	0	0	0	1,420	\$2,000	30,000	0	0	18,000	0	24,000	0
Connecticut.....	1	1	0	5	17	110	0	274	1	0	0	0	0	2,219	800	20,000	0	0	18,000	359	18,350	0
Dakota.....	1	0	10	14	0	104	2	109	11	0	0	0	0	2,700	12,500	125,000	0	0	116,000	0	116,000	0
Indiana.....	1	0	10	14	0	104	2	109	11	0	0	0	0	5,000	25,000	150,000	450,000	23,000	0	7,000	30,000	1,000
Massachusetts.....	1	0	43	49	177	177	0	184	39	3	0	20	12	7,715	15,000	135,000	550,000	25,500	0	8,449	84,553	500
Michigan.....	1	0	0	3	29	0	0	29	0	0	0	0	0	3,000	10,000	100,000	0	0	17,500	0	17,500	0
Missouri.....	1	0	0	16	0	27	0	27	20	1	0	0	5	100	900	0	0	0	4,505	26,333	35,463	14,505
New Hampshire.....	2	0	15	23	263	364	0	627	37	1	0	0	10	100	800	825,105	0	0	33,425	94,781	23,400	0
New Jersey.....	2	1	61	64	263	392	1	3,990	91	4	9	12	12	20,782	3,000	29,000	2,000,000	14,000	0	3,280	17,806	0
New York.....	3	5	9	26	64	50	2	621	68	0	0	0	0	94,500	10,000	1,000,000	2,000,000	14,000	0	0	14,000	0
Ohio.....	4	0	35	44	0	405	0	1,450	0	0	0	0	0	1,500	1,500	250,000	0	0	29,000	36,000	0	0
Pennsylvania.....	1	0	7	8	0	131	0	131	0	0	0	0	0	3,000	35,000	35,000	0	0	1,500	500	2,000	0
South Carolina.....	1	0	8	9	0	65	0	65	4	0	0	30	0	3,000	1,500	35,000	0	0	1,500	500	2,000	0
Vermont.....	1	0	7	8	0	65	0	65	4	0	0	30	0	3,000	1,500	35,000	0	0	1,500	500	2,000	0
Virginia.....	1	0	14	21	35	195	5	238	23	1	0	55	0	12,900	8,000	252,000	50,000	3,000	30,000	10,750	50,800	0
Total.....	30	12	214	348	562	2,199	10	7,976	302	17	.....	105	41	153,837	93,700	3,200,105	3,100,000	69,500	231,565	92,287	547,253	40,465

TABLE 57.—Statistics of Schools of Science not Endowed with the National Land Grant for 1887-88.—PART I.

Location.	Name.	President.	Date of Charter.	Year of First Opening.	Professors and Instructors.			Students.				Number of Degrees Conferred in Course in 1887-88.	Number of Endowed Professorships.	Number of Fellowships.	Number of Scholarships.	
					Preparatory Department.	Collegiate Department.	Total Number.	Number in Preparatory Department.	Number in Collegiate Department.	Number of Resident Graduates.	Total Number.				State.	Other.
1	Ontario, Cal.	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Ontario, Cal.	William Trafton Randall	1883	1885	6	0	6	50	0	0	50	0	.....	.....	.....	.....
2	Golden, Colo.	Chaffey College of Agriculture (University of Southern California).	1874	1874	0	0	0	0	45	1	46	4	0	0	0	0
3	Mansfield, Conn.	State School of Mines.	1881	1881	0	0	0	5	.....	.....	28	0	0	0	0	0
4	Brookings, Dak.	Storrs Agricultural School.	1881	1881	.....	.....	12	100	126	0	226	0	0	0	0	0
5	Exeter, N. H.	Dakota School of Mines.	1886	1887	5	10	15	5	10	38	48	1	0	0	0	0
6	Teaneck, Ind.	Ross Polytechnic Institute.	1874	1883	0	10	14	0	107	2	109	11	0	0	0	0
7	Cambridge, Mass.	Lawrence Scientific School (Harvard University).	1612	1848	0	23	28	0	20	.....	20	5	3	.....	.....	12
8	Amherst, Mass.	Bussey Institution (Harvard University).	.....	1871	.....	.....	6	.....	.....	.....	7	.....	.....	.....	.....	.....
9	Worcester, Mass.	Worcester Polytechnic Institute.	1865	1868	0	15	15	0	157	.....	157	34	2	.....	20	.....
10	Houghton, Mich.	State Mining School.	1885	1885	.....	.....	3	.....	.....	.....	29	0	0	0	0	0
11	St. Louis, Mo.	Polytechnic School of Washington University.	1853	1854	0	.....	.....	.....	27	.....	27	.....	.....	.....	.....	.....
12	Hanover, N. H.	Dartmouth College.	1769	1852	0	14	14	0	67	.....	67	18	.....	.....	.....	5
13	Hanover, N. H.	Thayer School of Civil Engineering (Dartmouth College).	1769	1871	0	2	2	0	10	.....	10	2	.....	.....	.....	.....
14	Hoboken, N. J.	Stevens Institute of Technology.	1870	1871	1	.....	.....	182	187	0	369	37	1	0	0	10
15	Newark, N. J.	Newark Technical School.	1885	1885	.....	.....	6	81	177	0	253	0	0	0	0	0

* Statistics of 1886-87.

TABLE 57.—Statistics of Schools of Science not Endowed with the National Land Grant for 1887-88.—PART I—Continued.

Location.	Name.	President.	Date of Charter.	Year of First Opening.	Professors and Instructors.		Students.				Number of Endowed Professorships.		Number of Fellowships.		Number of Scholarships.	
					Preparatory Department.	Collegiate Department.	Total Number.	Number in Preparatory Department.	Number in Collegiate Department.	Number of Resident Graduates.	Total Number.	Number of Degrees Conferred.	Number of Endowed Professorships.	Number of Fellowships.	State.	Other.
16 New York, N. Y.	Cooper Union Free Night Schools of Science and Art.	Geo. W. Plympton, A. M., C. E.	1859	1859	6	7	13	9	10	11	12	13	14	15	16	17
17 New York, N. Y.	Hebrew Technical Institute.	Henry M. Leipsziger, Ph. D.	1884	1884	0	45	45	0	228	228	228	47	0	0	0	0
18 New York, N. Y.	School of Mines of Columbia College.	Henry Drisler, LL. D., acting President.	1864	1864	0	45	45	0	228	228	228	47	0	0	0	0
19 Troy, N. Y.	Rensselaer Polytechnic Institute *	Hon. William Gurley, C. E.	1826	1824	0	16	16	0	164	164	164	44	1	0	0	0
20 Cincinnati, Ohio.	Industrial and Art School of the Ohio Mechanics' Institute.	R. E. Champion	1856	1856	0	12	12	0	555	555	555	0	0	0	0	0
21 Cincinnati, Ohio.	Technical School of Cincinnati.	Geo. R. Carothers, superintendent.	1886	1886	5	0	5	64	0	0	64	0	0	0	0	0
22 Cleveland, Ohio.	Case School of Applied Science	Cady Staley, Ph. D.	1880	1881	0	9	9	0	50	2	52	4	9	0	12	0
23 Philadelphia, Pa.	Franklin Institute *	Joseph M. Wilson	1824	1824	0	0	0	0	372	372	372	0	0	0	0	0
24 Philadelphia, Pa.	Spring Garden Institute *	John Baird	1852	1852	0	4	4	0	405	405	405	0	0	0	0	0
25 Philadelphia, Pa.	Wagner Free Institute of Science *	Samuel Wagner	1855	1855	0	31	31	0	405	405	405	0	0	0	0	0
26 South Bethlehem, Pa.	Lehigh University	R. A. Lambertson, LL. D.	1866	1866	0	81	81	0	131	0	131	0	0	0	0	0
27 Charleston, S. C.	South Carolina Military Academy	General Geo. D. Johnston	1843	1843	0	7	7	0	65	0	65	4	0	0	30	0
28 Northfield, Vt.	Norwich University	George Nichols, acting president.	1834	1834	0	8	8	0	178	5	183	23	1	0	55	0
29 Lexington, Va.	Virginia Military Institute.	Francis H. Smith, LL. D.	1839	1839	0	14	14	0	178	5	183	23	1	0	55	0
30 New Market, Va.	New Market Polytechnic Institute	W. H. Smith, A. M.	1870	1870	0	7	7	35	17	0	55	0	0	0	0	0

* Statistics of 1886-87.

TABLE 57.—Statistics of Schools of Science not Endowed with the National Land Grant for 1887-88.—PART II.

Name.	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
	Number of Years in Preparatory Course.	Number of Years in College Course.	Number of Volumes in Library.	Amount of Matriculation Fee.	Amount of Graduation Fee.	Annual Charge for Tuition to each Pupil.	Average Cost of Board and Lodging per Annum.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income from Productive Funds.	Amount of State or Municipal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.
1 Chaffey College of Agriculture (University of Southern California).....	560	.....	.....	\$25	\$180	.....	\$58,000	\$50,000	\$4,000	.....	\$2,200	\$6,200	.....
2 State School of Mines.....	4	1,420	0	0	0	240	\$12,000	30,000	0	0	\$24,000	0	24,000	0
3 Storr's Agricultural School.....	1,219	0	0	25	144	800	40,000	0	0	18,000	350	18,350	.....
4 Dakota Agricultural College.....	4	2,500	0	0	0	90	2,500	100,000	0	0	104,000	0	104,000	\$1,000
5 Dakota School of Mines.....	3-4	5,000	0	\$10	100	225	10,000	25,000	0	0	12,000	0	12,000	0
6 Rose Polytechnic Institute.....	4	5,000	.....	.....	100	175	25,000	150,000	450,000	23,000	.....	7,000	30,000	1,600
7 Lawrence Scientific School (Harvard University).....	4	3,285	.....	.....	150	.....	.....	.....	.....	.....	0	3,244	41,311	.....
8 Bussey Institution (Harvard University).....	2,885	.....	.....	150	300	15,000	155,000	550,000	25,500	0	455	10,342	.....
9 Worcester Polytechnic Institute.....	3-3½	1,536	.....	.....	150	250	10,000	100,000	0	0	17,500	4,750	33,040	415
10 State Mining School.....	2	3,000	0	0	0	.....	.....	.....	.....	.....	.....	0	17,500	500
11 Polytechnic School of Washington University.....
12 Chandler Scientific Department of Dartmouth College.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
13 Thayer School of Civil Engineering (Dartmouth College).....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
14 Stevens Institute of Technology.....	4	.....	.....	.....	150-225	.....	.....	.....	.....	.....	.....	26,333	26,333	10,000
15 Newark Technical School.....	4	100	0	0	0	0	900	0	0	0	4,565	0	9,130	4,565
16 Cooper Union Free Night Schools of Science and Art.....	20,382	.....	.....	0	.....	.....	630,000	.....	.....	0	0	46,056	400
17 Hebrew Technical Institute.....	400	.....	.....	0	.....	3,000	55,000	.....	.....	0	0	15,000	23,000
18 School of Mines of Columbia College.....	4	.....	.....	.....	200	.....	.....	.....	.....	.....	.....	.....	.....	.....
19 Rensselaer Polytechnic Institute.....	4	.....	\$5	25	200	.....	.....	140,105	.....	.....	.....	33,425	33,425	.....
20 Industrial and Art School of the Ohio Mechanics' Institute.....	12,231	.....

* Statistics of 1886-87.

TABLE 57.—*Statistics of Schools of Science not Endowed with the National Land Grant for 1887-88.*—PART II—Continued.

Name.	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
	Number of Years in Preparatory Course.	Number of Years in College Course.	Number of Volumes in Library.	Amount of Matriculation Fee.	Amount of Graduation Fee.	Annual Charge for Tuition to each Pupil.	Average Cost of Board and Lodging per Annum.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income from Productive Funds.	Amount of State or Municipal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.
21	Technical School of Cincinnati	4	.....	.....	.....	\$75-150	.....	.....	\$200,000	.....	.....	.....	\$3,280	\$3,575	.....
22	Case School of Applied Science	4	.....	.....	.....	100	.....	.....	.....	.....	.....	.....	.....	.....	.....
23	Franklin Institute * .....	.....	30,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	Spring Garden Institute * .....	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	.....
25	Wagner Free Institute of Science* .....	.....	4,500	.....	.....	0	.....	.....	.....	.....	\$14,000	.....	.....	14,000	.....
26	Lehigh University	4	60,000	.....	.....	0	\$320	\$10,000	1,000,000	\$2,000,000	.....	.....	.....	.....	.....
27	South Carolina Military Academy	4	1,000	.....	.....	(300)	.....	1,500	250,000	.....	.....	.....	.....	36,000	.....
28	Norwich University	4	3,000	.....	.....	45	.....	35,000	35,000	.....	.....	.....	.....	2,000	.....
29	Virginia Military Institute	4	12,500	.....	.....	365	150	3,000	250,000	50,000	3,000	30,000	10,000	50,000	0
30	New Market Polytechnic Institute	4	400	.....	.....	30-50	90	.....	2,000	0	0	0	750	800	0

* Statistics of 1886-87.

Location.	Name.	Remarks.
Princeton, N. J.	John C. Green School of Science (College of New Jersey)	Reported with classical department (see Table 49).
New York, N. Y.	Scientific Department of the University of the City of New York...	Reported with classical department (see Table 49).
Boston, Pa.	Pardee Scientific Department of Lafayette College.....	Reported with classical department (see Table 49).
Philadelphia, Pa.	Towne Scientific School (University of Pennsylvania).....	Reported with classical department (see Table 49).

TABLE 58.—Statistics of the United States Naval and Military Academics for 1887-88.

Location.	Name.	Superintendent.	Date of Organization.	Number of Instructors.	Number of Students.	Number of Years in Full Course of Study.	Number of Volumes in Library.	Value of Grounds, Buildings, and Apparatus.	Amount of United States Appropriation for the Last Year.
Annapolis, Md.	United States Naval Academy.....	Commander W. T. Sampson, U. S. N.....	1845	72	232	6	28,854	\$945,250	\$203,630
West Point, N. Y.	United States Military Academy.....	Col. John G. Parke, U. S. A.....	1802	51	280	4	32,361	.....	286,777

COMPARATIVE STATISTICS OF ATTENDANCE UPON COLLEGES AND SCIENTIFIC SCHOOLS
FOR 1875-76 AND 1885-86.

The Commissioner's Report for 1886-87 contained a table showing the ratio of attendance upon colleges and upon colleges and scientific schools in the several States as compared with their populations in 1875-76 and in 1885-86.

A similar table, prepared by Dr. De Bow, in 1857, was republished in the same Report. The latter dealt with white population only; consequently, comparisons made with the later statistics were likely to give a false impression as to the comparative demand for liberal education in the Southern States at the two dates employed in the investigation.

For a correct view of the situation it seemed necessary to supplement the results of the original investigation by a further study of the data from the Southern States pertaining solely to the white population and the collegiate attendance of white students therein.

Since the publication of the former Report this additional study has been made, and the tables are consequently repeated in the present Report, together with the additional material.

The populations have been estimated in this Office, the United States census of 1870 and of 1880 affording the basis. The statistics of attendance have been taken from the Reports of this Office. Students in preparatory courses or departments have not been included.

Considering the institutions involved in the discussion, it will be seen that there was a decrease of 9 in the number of colleges reporting attendance in 1885-86 as compared with the number in 1875-76, and an increase of 10 in the number of scientific schools. The attendance upon the smaller number of colleges in 1885-86 exceeded the attendance in 1875-76 by 7.072, or 27 per cent.; the attendance upon both colleges and scientific schools increased by 8,950, or 28 per cent.; whilst the increase in the estimated population was 11,355,972, or 25 per cent.

In other words, as compared with the increase of population, college attendance showed the slight excess of 1.52 per cent., and attendance upon both colleges and scientific schools an excess equivalent to 2.4 per cent.

TABLE 59.—Comparative Statistics of Attendance upon Colleges and Scientific Schools for 1875-76 and 1885-86.

State or Territory.	1875-76.						1885-86.						Population to One Student.		
	Number of Colleges.			Number of Students At- tending Colleges.			Number of Colleges.			Number of Students At- tending Colleges.			Colleges.		
	Population.	5	4	5	Number of Colleges and Scientific Schools.	6	Population.	7	8	9	10	11	1875-76.	1885-86.	1875-76.
NORTH ATLANTIC DIVISION.															
1 Maine.....	640,036	3	363	4	456	647,319	3	403	4	503	1,763	1,605	1,403	1,267	1,403
2 New Hampshire.....	335,217	1	249	4	353	362,292	1	250	4	376	1,345	1,449	1,544	1,449	1,544
3 Vermont.....	331,591	3	173	4	201	333,155	2	227	3	258	1,917	1,467	1,649	1,467	1,649
4 Massachusetts.....	1,614,860	7	1,720	14	2,235	1,942,141	6	2,165	12	3,203	951	897	729	696	729
5 Rhode Island.....	251,138	1	229	2	252	304,284	1	245	1	245	1,142	1,242	996	1,242	996
6 Connecticut.....	587,090	3	323	4	1,153	670,897	3	929	5	1,221	686	722	569	549	722
7 New York.....	4,791,319	25	3,065	31	4,391	5,330,491	22	4,105	29	4,986	1,562	1,299	1,091	1,069	1,299
8 New Jersey.....	1,025,080	4	716	7	960	1,278,023	4	580	7	897	1,446	2,203	1,150	1,446	2,203
9 Pennsylvania.....	3,969,550	23	2,266	35	2,653	4,722,954	26	3,271	35	4,810	1,751	1,441	1,493	981	1,441
SOUTH ATLANTIC DIVISION.															
10 Delaware.....	137,556	1	41	1	41	158,768	1	41	1	41	3,355	3,872	3,355	3,872	3,872
11 Maryland.....	869,978	8	707	9	754	1,009,708	6	654	9	948	1,216	1,544	1,154	1,065	1,544
12 District of Columbia.....	157,592	4	152	4	152	203,459	4	208	4	288	1,365	1,705	1,205	1,268	1,705
13 Virginia.....	1,390,292	8	1,001	14	1,458	1,690,783	7	829	13	2,255	1,389	1,979	1,953	1,323	1,953
14 West Virginia.....	540,705	3	165	3	165	692,726	2	63	2	63	3,277	10,996	3,277	10,996	3,277
15 North Carolina.....	1,256,043	7	983	8	444	1,535,341	7	536	7	536	3,279	2,846	2,829	2,846	2,829
16 South Carolina.....	867,501	6	331	7	451	1,083,789	7	502	8	615	2,471	2,162	1,923	1,923	2,162
17 Georgia.....	1,337,515	6	438	8	581	1,691,869	7	591	12	873	2,867	2,867	2,388	1,765	2,867
18 Florida.....	233,216	0	0	0	0	335,406	1	65	1	65	2,843	2,906	2,388	5,206	2,906
SOUTH CENTRAL DIVISION.															
19 Kentucky.....	1,508,849	14	969	15	1,014	1,801,831	9	867	10	942	1,600	2,078	1,488	1,913	2,078
20 Tennessee.....	1,421,865	17	1,014	18	1,168	1,723,956	12	951	12	951	1,362	1,812	1,217	1,812	1,812
21 Alabama.....	1,163,726	3	316	4	420	1,407,384	3	438	4	456	3,635	3,550	2,735	3,218	3,550

TABLE 59.—Comparative Statistics of Attendance upon Colleges and Scientific Schools for 1875-76 and 1885-86—Continued.

State or Territory.	1875-76.						1885-86.						Population to One Student.		
				1875-76.						1885-86.					
	Population.	Number of Colleges.	Number of Students At- tending Colleges.	Number of Colleges.	Number of Colleges and Scientific Schools.	Number of Students At- tending Scientific Schools.	Population.	Number of Colleges.	Number of Students At- tending Colleges.	Number of Colleges and Scientific Schools.	Number of Students At- tending Scientific Schools.	Number of Students At- tending Scientific Schools.	1875-76.	1885-86.	1885-86.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
SOUTH CENTRAL DIVISION—continued.															
Mississippi.....	998,614	4	192	4	192	1,237,453	3	337	5	569	5,201	3,672	5,201	2,175	
Louisiana.....	848,116	4	55	5	170	1,068,951	9	705	9	705	15,420	1,431	4,989	1,431	
Texas.....	1,219,969	6	528	7	618	2,027,895	5	468	6	591	2,310	4,324	1,974	3,431	
Arkansas.....	655,816	4	108	5	175	935,058	4	180	4	180	6,072	5,195	3,748	5,195	
NORTH CENTRAL DIVISION.															
Ohio.....	2,973,227	28	2,262	29	2,411	3,348,589	22	2,274	24	2,407	1,315	1,473	1,223	1,291	
Indiana.....	1,853,382	16	1,318	17	1,336	2,061,008	14	1,478	16	1,695	1,406	1,394	1,387	1,215	
Illinois.....	2,850,247	24	1,565	25	1,931	3,290,204	22	1,689	23	1,818	1,821	1,942	1,461	1,894	
Michigan.....	1,438,032	8	845	9	1,011	1,912,181	7	1,159	8	1,454	1,702	1,649	1,422	1,315	
Wisconsin.....	1,204,265	9	695	9	665	1,563,423	8	670	9	732	1,733	2,333	1,733	2,135	
Minnesota.....	1,620,554	3	159	4	168	1,117,798	4	489	4	489	3,903	2,286	3,693	2,286	
Iowa.....	1,435,332	17	960	18	1,262	1,766,239	19	2,006	20	2,273	1,496	880	1,138	777	
Nebraska.....	1,977,697	13	952	13	1,056	2,433,747	13	1,310	15	1,358	2,077	1,858	1,872	1,792	
Dakota.....	514,856	0	0	0	0	415,610	3	43	4	133	2,077	9,665	2,477	3,125	
Nebraska.....	268,699	2	92	3	105	740,615	3	299	4	308	2,921	2,477	2,559	2,404	
Kansas.....	666,211	6	170	7	473	1,284,809	9	917	10	1,345	3,919	1,401	1,408	955	
WESTERN DIVISION.															
Montana.....	30,283	0	0	0	0	93,029	1	38	1	38	.....	2,443	.....	2,448	
Wyoming.....	14,351	0	0	0	0	31,391	0	0	0	0	.....	.....	2,194	1,347	
Colorado.....	103,122	0	0	1	47	243,910	3	92	6	181	.....	2,651	.....	.....
New Mexico.....	107,607	0	0	0	0	131,353	0	0	0	0	.....	.....	.....	.....

TABLE 60.—*Ratio of College Attendance to the White Population in Twenty-nine States in 1857.*

[From De Bow's Review, 1857, p. 517.]

State.	White Population.	Number of College and University Students.	Proportional Number of Students to White Population.
1	2	3	4
NORTH ATLANTIC DIVISION.			
Maine.....	561,813	282	2,083
New Hampshire.....	317,456	273	1,162
Vermont.....	313,402	464	684
Massachusetts.....	985,450	1,043	944
Rhode Island.....	143,875	150	955
Connecticut.....	863,090	738	441
New York.....	3,043,325	2,673	1,144
New Jersey.....	465,500	470	920
Pennsylvania.....	2,258,166	3,286	687
SOUTH ATLANTIC DIVISION.			
Delaware.....	71,169	144	491
Maryland.....	417,943	992	421
Virginia.....	894,800	1,343	666
North Carolina.....	553,028	513	1,078
South Carolina.....	274,563	720	581
Georgia.....	521,572	1,535	389
SOUTH CENTRAL DIVISION.			
Kentucky.....	761,413	1,873	406
Tennessee.....	753,836	1,605	471
Alabama.....	426,513	567	752
Mississippi.....	265,071	308	958
Louisiana.....	255,491	469	544
Arkansas.....	162,189	150	1,031
NORTH CENTRAL DIVISION.			
Ohio.....	1,955,050	3,321	539
Indiana.....	977,154	1,062	913
Illinois.....	846,034	442	1,904
Michigan.....	395,971	308	1,232
Wisconsin.....	304,756	75	4,083
Iowa.....	91,635	100	916
Missouri.....	592,004	1,009	586
North Atlantic Division.....	8,452,095	9,379	901
South Atlantic Division.....	2,733,975	5,247	521
South Central Division.....	2,637,513	4,972	534
North Central Division.....	5,162,604	6,317	817
United States.....	19,005,287	25,915	733

TABLE 61.—*Ratio of College Attendance to White Population in Fifteen States in 1885-86.*

State.	White Population.	White Population to One Student, 1885-86.			
		Number of Col- leges.	Colleges.	Number of Col- leges and Sci- entific Schools.	Colleges and Scientific Schools.
1	2	3	4	5	6
SOUTH ATLANTIC DIVISION.					
Delaware	181,680	1	3,211	1	3,211
Maryland	782,710	6	1,153	9	825
Virginia	967,160	7	1,153	13	1,069
West Virginia	663,689	23	10,534	2	10,534
North Carolina	945,050	7	1,897	7	1,763
South Carolina	426,530	7	849	8	693
Georgia	897,740	6	1,519	12	1,055
Florida	170,840	1	2,628	1	.....
SOUTH CENTRAL DIVISION.					
Kentucky	1,505,000	9	1,743	10	1,600
Tennessee	1,272,900	12	1,443	12	1,443
Alabama	732,020	3	1,671	4	1,650
Mississippi	524,230	3	1,555	5	993
Louisiana	488,340	9	721	9	721
Texas	1,525,200	5	3,259	6	2,530
Arkansas	689,210	4	4,078	4	4,078
SUMMARY.					
South Atlantic Division	4,985,390	41	1,560	57	1,242
South Central Division	6,736,900	45	1,757	50	1,589

CHAPTER XII.

PROFESSIONAL INSTRUCTION.

The efforts made in several institutions to raise the standard of professional training in the United States, the discussions of the subject in professional journals and popular magazines, and its intrinsic importance give particular interest to the columns of the succeeding summary showing for the three classes of professional schools the number and proportion of students who had received a degree in art or science prior to entering upon their professional studies.

Theology leads in this respect, having 23 per cent. of students who had taken degrees, as against 18 per cent. in law schools, 8 per cent. in the regular medical schools, and 9 per cent. in the homœopathic.

The statistics do not indicate to the full extent the advantage which theology has over the other professions in respect to the previous training of its students.

As will be seen by reference to the detailed Table 65, Column 15, the theological schools of several denominations maintain courses from five to seven years in duration. In such cases three or four years are given to a course of study similar in character to that of classical colleges; the student passes from this to the special theological course, receiving a degree only at the end of the latter.

Considering the country by geographical sections, it will be seen that the North Atlantic section surpasses all others in the relative proportion of students in all classes of professional schools holding degrees.

The number of individual States which have a high showing in this respect is small, as will be seen by reference to the summaries, Tables 64, 66, and 63.

The States in which fifty per cent. or more of professional students had taken a college degree are, for theology, Connecticut, Massachusetts, and New Jersey; for law, Alabama and Massachusetts. As regards medical students, no State shows so high a percentage as fifty, considering the students of regular schools only. Massachusetts makes the nearest approach, having forty-five per cent. of graduates in the total of such students.

Considering eclectic schools Illinois has 65 per cent. of graduates in the total number of students.

In previous Reports reference has been made to the proposition of the academic council of Harvard University for the reduction of the college course for bachelors of art who propose to enter the professional schools and the graduate department.

The proposition has been discussed at several meetings of the college faculty, but as yet they have not seen their way to recommend any definite action.

Intimately connected with the question of the previous preparation of professional students is that of the extension and elevation of the professional courses themselves.

The medical schools are at present the subject of the chief efforts in this direction. President Barnard, of Columbia College, reports that the final examinations in the medical school have been very searching the present year, and that arrangements have been made for enforcing equally vigorous entrance examinations in the future. He predicts that whatever may be lost in numbers by this course will be abundantly compensated in the improved character and respectability of the profession.

The auxiliary faculty of medicine in the University of Pennsylvania materially increases the provision for a high order of professional training. This course supplements the customary course of medical lectures by lectures on collateral branches of science essential to the thorough education of the physician. It is essentially a post-graduate course. Matriculates must have entered at least upon the third year of medical study, and the second year in the auxiliary department is taken in connection with the fourth of the regular medical course.

The need of endowment funds for professional schools is emphasized by the history of efforts already made for the improvement of medical education. President Dwight, of Yale University, in his report for 1887, calls attention to the fact that the raising of the standards of the school, an experiment which Yale was one of the first to make, has caused a diminution in attendance.

"The great need of the school at the present time," he says "is an endowment which may furnish it with a sufficient income to supply its wants and to enable its professors, or some of them, to devote their whole time and effort to the work of instruction."

H. P. Bowditch, dean of the medical school of Harvard University, in his report for 1887-88, says:

"The improvement of the course of study has been a subject of grave consideration by the faculty. The establishment of a compulsory four-years' graded course has been formally recognized as desirable as soon as a proper financial basis can be assured. What this basis should be, or in other words, what loss the school would be likely to incur from making the change, is a question about which considerable difference of opinion prevails. A committee charged with the consideration of the subject reported that, in their judgment, a subscription income of \$20,000 a year for five years would justify the establishment of such a course. As it was evidently impossible to obtain a sufficient guaranty fund, the action of the faculty was limited to making certain changes in the course of instruction."

That the condition of professional schools with respect to endowments is far from satisfactory the statistics before us plainly indicate. Theological schools are most favored in this respect, sixty-one or 44 per cent. of the entire number reporting endowments to the total amount of \$11,428,586.

Of law schools only one reports endowment, and of medical schools seven. Of this number one is homœopathic and six regular, two of the latter being schools for women. One dental and one pharmaceutical school also report endowments. It should be borne in mind that professional schools included in a university foundation generally share in the endowment of the same.

The chief particulars of the current record of the professional schools of the United States, as reported from the several States and Territories, are presented in the summaries, Tables 64, 66, and 68.

Considering the country by geographical sections, the totals appear as follows:

TABLE 62.—*Summary of Statistics of Schools of Theology, Law, and Medicine, by Geographical Sections, for 1887-88.*

Divisions.	Schools of Theology.					Schools of Law.				
	Number of Schools.	Number of Professors and Instructors.	Students.			Number of Schools.	Number of Professors and Instructors.	Students.		
			Total Number.	Number Who Have Received a Degree in Letters or Science.	Ratio of Students Who Have Received a Degree to Total Number.			Total Number.	Number Who Have Received a Degree in Letters or Science.	Ratio of Students Who Have Received a Degree to Total Number.
North Atlantic Division.....	44	291	2,262	1,032	<i>Per ct.</i> 46	10	109	1,280	303	<i>Per ct.</i> 24
South Atlantic Division.....	22	125	1,181	28	2	13	54	858	109	13
South Central Division.....	15	56	598	8	1	9	31	318	23	9
North Central Division.....	54	236	2,441	405	17	14	87	1,118	186	17
Western Division.....	3	18	30	13	43	3	12	93	36	39
United States.....	138	726	6,512	1,486	23	49	233	3,667	662	18

Divisions.	Schools of Medicine.					Homœopathic.				
	Number of Schools.	Number of Professors and Instructors.	Regular.			Number of Schools.	Number of Professors and Instructors.	Students.		
			Total Number.	Number Who Have Received a Degree in Letters or Science.	Ratio of Students Who Have Received a Degree to Total Number.			Total Number.	Number Who Have Received a Degree in Letters or Science.	Ratio of Students Who Have Received a Degree to Total Number.
North Atlantic Division.....	20	579	4,397	503	<i>Per ct.</i> 11	4	110	473	49	<i>Per ct.</i> 10
South Atlantic Division.....	16	231	1,424	53	4	.....	.....	.....	.....	.....
South Central Division.....	11	143	1,847	5	.....	.....	.....	.....	.....	.....
North Central Division.....	35	692	3,250	283	9	7	94	624	50	8
Western Division.....	6	101	254	21	8	1	20	21	0	0
United States.....	88	1,746	11,172	865	8	12	224	1,118	99	9

I.—SCHOOLS OF THEOLOGY.

The following is a comparative statement of the number of schools of theology (including theological departments) reporting to this Bureau each year from 1878 to 1888 inclusive (1883 omitted), with the number of professors and number of students:

	1878.	1879.	1880.	1881.	1882.	1884.	1885.	1886.	1887.	1888.
Number of institutions.....	125	133	142	144	145	146	152	142	145	138
Number of instructors.....	577	600	633	624	712	750	793	803	867	726
Number of students.....	4,320	4,738	5,242	4,793	4,921	5,290	5,775	6,344	6,306	6,512

TABLE 63.—Summary of Statistics of Schools of Theology, According to Denominations, for 1887-88.

Religious Denominations.	Number of—			Religious Denominations.	Number of—		
	Schools.	Instructors.	Students.		Schools.	Instructors.	Students.
Baptist.....	15	87	1,135	Protestant Episcopal.....	12	73	313
Free Baptist.....	2	8	73	Congregational.....	10	70	363
Roman Catholic.....	13	112	962	Universalist.....	3	14	63
Lutheran.....	15	55	943	Unitarian.....	1	6	38
Methodist Episcopal.....	14	66	738	Christian.....	6	16	276
Methodist Protestant.....	2	7	34	Reformed.....	5	18	162
Methodist Episcopal, South.....	2	7	66	Reformed (Dutch).....	1	6	21
German Methodist Episcopal.....	1	3	39	New Church.....	1	5	10
Wesleyan Methodist.....	1	4	14	Unsectarian.....	3	28	171
African Methodist Episcopal, Zion.....	1	4	3	United Brethren.....	12	2	66
African Methodist Episcopal.....	1	6	16	Jewish.....	1	9	5
Presbyterian.....	14	81	728	Evangelical Association.....	1	3	18
Cumberland Presbyterian.....	1	4	38	German Evangelical.....	1	3	82
United Presbyterian.....	2	14	78				
Reformed Presbyterian.....	1	3	19	Total.....	133	726	6,512
Associate Reformed Presbyterian.....	1	6	.....			

TABLE 64.—Summary of Statistics of Schools of Theology for 1887-88.

States.	Number of Schools.	Professors and Instructors.			Students.			Number of Degrees Conferred in Course in 1887-88.	Number of Endowed Professorships.	Number of Scholarships.	Number of Volumes in Library.
		Resident.	Non-Resident.	Total Number.	Total Number.	Number Holding Degrees in Letters or Science.	Number of Graduates in 1887-88.				
1	2	3	4	5	6	7	8	9	10	11	12
Alabama.....	3	6	0	6	63	.....	17	9	.....	.....	3,200
California.....	12	8	6	14	23	13	5	4	5	7	19,200
Colorado.....	1	1	3	4	2	.....	2	0	0	5	5,500
Connecticut.....	27	4	31	187	157	23	45	23	11	49	72,222
District of Columbia.....	12	.....	17	193	.....	23	13	13	1	2	2,900
Georgia.....	5	3	8	100	8	6	.....	.....	.....	.....	8,800
Illinois.....	16	64	2	69	923	118	173	32	11	17	63,550
Indiana.....	4	10	2	12	133	27	21	.....	1	.....	275
Iowa.....	6	13	0	13	125	4	3	.....	5	1	1,700
Kentucky.....	3	17	0	17	236	6	24	0	3	7	29,500
Louisiana.....	2	5	0	5	40	.....	.....	.....	.....	.....	4,000
Maine.....	2	9	0	9	61	10	10	.....	5	3	19,200
Maryland.....	5	37	0	37	374	.....	50	23	.....	3	51,000
Massachusetts.....	28	9	60	316	180	49	27	17	51	.....	85,952
Michigan.....	8	9	0	9	67	6	3	.....	4	.....	.....
Minnesota.....	4	21	0	21	219	3	3	2	6	14	6,000
Missouri.....	4	14	0	14	228	83	55	1	2	.....	12,400
Nebraska.....	2	5	0	5	9	.....	.....	0	1	.....	545
New Jersey.....	6	29	3	32	331	196	51	8	15	96	112,814
New York.....	11	69	11	80	743	306	160	9	82	135	142,041
North Carolina.....	5	15	1	16	70	6	4	.....	.....	9	1,000
Ohio.....	11	61	4	65	530	133	77	32	16	24	46,200
Pennsylvania.....	15	60	10	79	624	183	126	11	25	39	132,021
South Carolina.....	5	23	9	32	269	18	13	.....	.....	8	21,700
Tennessee.....	7	23	0	23	159	2	12	16	3	.....	21,825
Virginia.....	3	14	1	15	170	1	18	2	11	25	28,000
Wisconsin.....	4	27	1	28	207	26	31	11	1	5	26,600
Total.....	133	614	69	726	6,512	1,436	985	229	180	510	910,245

TABLE 64.—*Summary of Statistics of Schools of Theology for 1887-88—Continued.*

States.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for Year from Productive Funds.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.
1	13	14	15	16	17	18	19
Alabama.....		\$32,500	\$8,000	\$400	.....	\$400	\$1,800
California.....		110,000	235,000	14,200	0	14,200	600
Colorado.....		50,000	15,000	0	0	.....	0
Connecticut.....	\$60,074	163,207	775,548	21,946	.....	95,410	17,575
District of Columbia.....	125	70,000	30,000	.....	.....	3,450	.....
Georgia.....		75,000	200,000	.....	.....	13,400	180,000
Illinois.....		1,477,000	1,461,497	95,170	\$1,500	123,401	259,700
Indiana.....		.....	.....	.....	.....	.....	.....
Iowa.....		25,200	14,000	980	12	6,941	.....
Kentucky.....		156,000	527,000	26,000	.....	30,000	27,000
Louisiana.....		.....	.....	.....	.....	.....	.....
Maine.....		65,000	209,000	14,200	.....	14,200	2,529
Maryland.....	8,650	583,000	17,500	700	1,000	11,000	4,533
Massachusetts.....		653,769	1,447,677	29,375	1,040	132,337	11,000
Michigan.....		.....	.....	.....	.....	6,694	.....
Minnesota.....		148,000	143,000	8,947	1,371	20,587	17,281
Missouri.....		325,000	30,000	1,800	.....	11,800	1,700
Nebraska.....		5,000	7,000	636	.....	2,494	100
New Jersey.....	550	618,222	703,700	35,100	.....	48,239	601
New York.....	500	2,049,827	2,692,556	157,447	.....	178,417	115,873
North Carolina.....		20,000	.....	.....	.....	3,220	.....
Ohio.....		550,000	661,009	41,896	.....	73,956	50,600
Pennsylvania.....		464,000	1,471,907	86,396	9,593	132,564	40,146
South Carolina.....	350	115,000	400,000	6,400	500	8,400	.....
Tennessee.....		125,000	.....	.....	1,500	1,500	3,400
Virginia.....		125,000	334,192	15,000	267	15,267	2,846
Wisconsin.....		300,000	45,000	2,054	.....	9,829	5,000
Total.....	70,249	8,307,725	11,423,586	553,647	16,783	953,356	742,234

TABLE 65.—Statistics of Schools of Theology for 1887-88.—PART I.

Location.	Name.	President or Dean.	Date of Charter.	Year of First Opening.	Religious Denomination.	Number of Professors and Instructors.			Number of Students.			Number of Degrees Conferred in Course in 1887-88.	Is there any Examination for Admission?	Number of Years in Course.	Number of Weeks in Scholastic Year.
						Resident.	Non-Resident.	Total.	Total Number.	Number Holding Degrees in Letters or Science.	Number of Graduates in 1887-88.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
ALABAMA.															
1	Selma	Theological Department of Selma University.*	Rev. Charles L. Purce, A. B.	1878	Baptist	2	0	2	23	.....	9	9	.....	7	.....
2	Talladega	Theological Department of Talladega College.*	Rev. Henry S. De Forest, D. D.	1872	Cong.	1	0	1	14	0	2	0	.....	.....	.....
3	Tuscaloosa	Institute for Training Colored Ministers.	Rev. C. A. Stillman, D. D.	1876	Presb.	3	0	3	26	0	6	0	Yes.	4	42
CALIFORNIA.															
4	Oakland	Pacific Theological Seminary	Rev. Joseph A. Benton, D. D.	1868	Cong.	4	6	10	15	4	5	4	Yes.	3	37
5	San Francisco	San Francisco Theological Seminary.	Rev. William Alexander, D. D.	1872	Presb.	4	0	4	13	9	2	0	Yes.	3	35
COLORADO.															
6	Denver	Matthews Hall	Bishop John F. Spalding	1880	P. E.	1	3	4	2	.....	2	0	Yes.	3	38
CONNECTICUT.															
7	Hartford	Hartford Theological Seminary	Rev. Chester D. Hartman, D. D.	1834	Cong.	9	3	12	40	35	6	0	Yes.	3	35
8	Middletown	Berkeley Divinity School	Rev. Frederic Gardiner, D. D., Librarian.	1851	P. E.	5	1	6	30	27	10	0	Yes.	3	36
9	New Haven	Theological Department of Yale University.	Rev. Timothy Dwight, D. D., LL. D.	1822	Non-sect.	13	.....	13	117	95	29	29	Yes.	3	35

* Statistics of 1886-87.

TABLE 65.—Statistics of Schools of Theology for 1887-88.—PART I—Continued.

Location.	Name.	President or Dean.	Date of Charter.	Year of First Opening.	Religious Denomination.	Number of Professors and Instructors.				Number of Students.				Is there any Examination for Admission?	Number of Years in Course.	Number of Weeks in Scholastic Year.
						Resident.	Non-Resident.	Total.	Total.	Total Number.	Number Holding Degrees in Letters or Science.	Number of Graduates in 1887-88.	Number of Degrees Conferred in Course in 1887-88.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
DISTRICT OF COLUMBIA.																
10	Washington.....	Theological Department of Howard University.....	1867	1870	Non-sect.....	.....	.....	7	38	.....	.....	13	Yes.....	3	.....	.....
11	Washington.....	Wayland Seminary.....	.....	1865	Baptist.....	.....	.....	10	160	.....	.....	22	Yes.....	3	36	.....
GEORGIA.																
12	Atlanta.....	Gammon School of Theology.....	1888	1888	M. E.....	3	3	6	62	3	3	9	Yes.....	3	34	.....
13	Atlanta.....	Theological Department of Atlanta Baptist Seminary.....	.....	1867	Baptist.....	2	0	2	38	.....	.....	.....	.....	2	34	.....
ILLINOIS.																
14	Bourbonnais Grove.....	Theological Department of St. Viator's College.....	.....	.....	R. C.....	.....	.....	3	14	.....	.....	.....	.....	.....	.....	.....
15	Chicago.....	Chicago Theological Seminary.....	1855	1856	Cong.....	11	0	11	115	30	11	3	Yes.....	3	32	.....
16	Chicago.....	McGormick Theological Seminary of the Presbyterian Church.....	1857	1859	Presb.....	7	.....	7	117	.....	36	0	Yes.....	3	30	.....
17	Chicago.....	Western Theological Seminary.....	1884	1885	P. E.....	5	0	5	15	.....	.....	.....	.....	3-5	.....	.....
18	Eureka.....	Bible Department of Eureka College.....	1855	1864	Christian.....	2	0	2	45	.....	.....	0	.....	3	39	.....
19	Evanston.....	Garrett Biblical Institute.....	.....	1854	M. E.....	8	0	8	175	30	35	12	.....	3	.....	.....
20	Evanston.....	Norwegian and Danish Theological School.....	.....	1886	M. E.....	2	0	2	19	.....	3	0	Yes.....	3	35	.....

TABLE 65. — *Statistics of Schools of Theology for 1887-88.* — PART I — Continued.

Location.	Name.	President or Dean.	Date of Charter.	Year of First Opening.	Religious Denomination.	Number of Professors and Instructors.				Number of Students.				Number of Degrees Conferred in Course in 1887-88.	Is there any Examination for Admission?	Number of Years in Course.	Number of Weeks in Scholastic Year.
						Resident.	Non-Resident.	Total.	Total.	Total Number.	Number Holding Degrees in Letters or Science.	Number of Graduates in 1887-88.	Number of Degrees Conferred in Course in 1887-88.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
MARYLAND.																	
47 Baltimore.....	Centenary Biblical Institute.....	Rev. W. Maslin Frysinger, D.D.	.....	1872	M. F.....	4	0	4	65	.....	3	0	Yes.	3	40		
48 Baltimore.....	Theological Seminary of St. Sulpice and St. Mary's University.....	Very Rev. A. Magnien, S. S., D.D.	1860	1791	R. C.....	10	0	10	200	.....	40	22	Yes.	6	40		
49 Emmitsburg	Mt. St. Mary's Ecclesiastical Seminary.	Rev. Edward P. Allen, A. M....	1830	1808	R. C.....	12	0	12	30	.....	.....	.....	Yes.	6	42		
50 Ilchester	Schola of the Congregation of the Most Holy Redeemer, Mount St. Clement.	Rev. Eugene Grinnin, c. s. s. r.	1873	1868	R. C.....	7	0	7	55	.....	5	0	Yes.	6	47		
51 Westminster.....	Westminster Theological Seminary..	Rev. James T. Ward, D. D., F. S. S. C.	1884	1883	M. Prot. ...	4	0	4	24	0	2	0	Yes.	3	30		
MASSACHUSETTS.																	
52 Andover	Andover Theological Seminary.....	Rev. Egbert C. Smyth, D. D....	1807	1808	Cong.....	11	3	14	50	41	20	.....	Yes.	3	40		
53 Boston	Boston University School of Theology.	William F. Warren, s. t. d., LL. D.	1869	1847	M. E.....	.....	.....	15	117	68	.....	11	Yes.	3-4	.....	
54 Cambridge.....	Divinity School of Harvard University.	C. W. Eliot, LL. D.....	1650	1819	Non-sect..	.....	.....	8	16	15	.....	2	Yes.	3	38		
55 Cambridge.....	Episcopal Theological School.....	Rev. George Z. Gray, D. D....	1867	1867	P. E.....	6	.....	6	26	18	6	5	Yes.	3	38		
56 College Hill	Tufts College Divinity School.....	Rev. Elmer H. Capen, D. D....	1852	1869	Univ	5	0	5	36	.....	9	9	Yes.	3-4	36		
57 Newton Centre.....	Newton Theological Institution.....	Rev. Alvah Hovey, D. D., LL. D.	1825	1825	Baptist... LL. D.	6	1	7	61	38	11	.....	Yes.	3	38		
58 Waltham.....	New Church Theological School.....	Rev. John Worcester.....	.....	1866	N. Church	0	5	5	10	0	3	0	No...	3	32		

TABLE 65.—*Statistics of Schools of Theology for 1887-88.*—PART I—Continued.

Location.	Name.	President or Dean.	Date of Charter.	Year of First Opening.	Religious Denomination.	Number of Professors and Instructors.		Number of Students.				Number of Degrees Conferred in Course in 1887-88.	Is there any Examination for Admission?	Number of Years in Course.	Number of Weeks in Scholastic Year.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
NEW YORK—cont'd.															
81	Hamilton	Hamilton Theological Seminary.....		1819	Baptist.....	6	2	8	43	24	15	0	Yes..	3	39
82	Hartwick	Hartwick Seminary, Theological Department.	Rev. Ebenezer Dodge, D. D., LL. D.	1816	Lutheran	3	2	5	15	0	2	.....	No...	3	39
83	New York	General Theological Seminary of the Protestant Episcopal Church.	Rev. Eugene Aug. Hoffman, D. D.	1822	P. E.	8	1	9	90	75	20	8	Yes..	3	40
84	New York	Union Theological Seminary.....	Rev. Thomas S. Hastings, D. D., secretary.	1839	Presb.....	10	1	11	122	126	35	0	Yes..	3	34
85	Niagara University...	Seminary of Our Lady of Angels.....	Rev. M. J. Kircher, C. M., secretary.	1883	R. C.	8	0	8	64	21	12	0	Yes..	6	40
86	Rochester.....	Rochester Theological Seminary	Rev. Augustus H. Strong, D. D.	1850	Baptist.....	12	0	12	108	28	41	0	Yes..	3	35
87	Stanfordville	Christian Biblical Institute.....	Rev. J. B. Weston, D. D.....	1863	Christian..	2	3	5	21	0	3	0	Yes..	3	34
88	Troy	St. Joseph's Provincial Seminary.....	Very Rev. H. Gabriels, S. T. D.	1864	R. C.	7	0	7	136	.....	26	.....	Yes..	6	40
NORTH CAROLINA.															
89	Charlotte	Theological Department of Biddle University.....	Rev. W. F. Johnson, D. D.....	1877	Presb	3	0	3	12	6	4	.....	Yes..	3	.....
90	Raleigh	Theological Department of St. Augustine's Normal School.	Rev. Robert B. Sutton, D. D.....	1867	P. E.	5	1	6	15	0	0	0	Yes..	3	36
91	Raleigh	Theological Department of Shaw University.	Rev. H. M. Tupper, D. D	1865	Baptist....	2	0	2	40	.....	.....	.....	.....	2	.....

TABLE 65.—*Statistics of Schools of Theology for 1887-88.*—PART I—Continued.

Location.	Name.	President or Dean.	Date of Charter.	Year of First Opening.	Religious Denomination.	Number of Professors and Instructors.			Number of Students.			Is there any Examination for Admission?	Number of Years in Course.	Number of Weeks in Scholastic Year.	
						Resident.	Non-Resident.	Total.	Total Number.	Number Holding Degrees in Letters or Science.	Number of Graduates in 1887-88.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PENNSYLVANIA—continued.															
118 Upland.....	Grözer Theological Seminary.....	Henry G. Weston.....	1867	1868	Baptist.....	6	0	6	54	.....	12	0	Yes..	3	39
119 Villanova.....	Ecclesiastical Department of Villanova College.	Rev. F. M. Sheeran, S. T. B., O. S. A.	.....	1842	R. C.	4	0	4	21	.....	.....	.....	.....	.....	.....
SOUTH CAROLINA.															
120 Columbia.....	Benedict Institute.....	Rev. C. E. Pecker, A. M.	.....	1871	Baptist.....	8	5	13	227	.....	7	0	Yes..	9	35
121 Columbia.....	Theological Department of Allen University.....	Rev. B. W. Arnett, D. D.	1880	1887	A. M. R.	3	3	6	16	.....	.....	.....	Yes..	3	32
122 Columbia.....	Theological Seminary of the General Assembly of the Presbyterian Church in the United States.	J. D. Tadlock, chairman of faculty.	.....	1828	Presb.....	3	1	4	22	18	6	0	.....	3	35
123 Due West.....	Associate Reformed Theological Seminary.*	Rev. W. M. Grier, D. D.	.....	1839	As. Ref. Presb.	6	0	6	.....	.....	.....	.....	.....	4	.....
124 Newberry.....	Theological Seminary of the South, Newberry College.	Rev. G. W. Holland, Ph. D.	.....	.....	Lutheran.	3	0	3	4	.....	.....	0	.....	3	.....
TENNESSEE.															
125 Chattanooga.....	Theological Department of Chattanooga University.	Rev. Edward S. Lewis, A. M.	1886	1886	M. E.	1	0	1	9	.....	.....	0	.....	8	.....
126 Lebanon.....	Theological School of Cumberland University.	Nathan Green, LL. D., chancellor.	1842	1853	Cumb. Pr.	4	0	4	38	.....	.....	14	.....	2	40

TABLE 65.—Statistics of Schools of Theology for 1887-88.—PART II.

Name.	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	Number of Endowed Professors.	Number of Scholarships.	Number of Volumes in Library.	Amount of Matriculation Fee.	Amount of Graduation Fee.	Annual Charge for Tuition to Each Pupil.	Average Cost of Board and Lodging per Annum.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for Year from Productive Funds.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.
ALABAMA.														
1 Theological Department of Selma University *			500						\$25,000	\$8,000	\$400		\$400	\$1,800
2 Theological Department of Talladega College*			1,500						5,000	0	0	0		0
3 Institute for Training Colored Ministers.....	0	0	1,200			0	\$80	0	2,500	0	0	0		
CALIFORNIA.														
4 Pacific Theological Seminary.....	3	7	3,300	0	0	0	130		80,000	70,000	4,200	0	4,200	600
5 San Francisco Theological Seminary.....	3	0	16,000	0	0	0	200	0	30,000	165,000	10,000	0	10,000	
COLORADO.														
6 Matthews Hall.....	0	5	5,500	0	0	0			50,000	15,000	0	0		0
CONNECTICUT.														
7 Hartford Theological Seminary.....	25	25	45,000	0	0	0	125	\$60,074	163,207	359,424	21,946	0	21,946	17,575
8 Berkeley Divinity School.....			20,222	0	0	0						0		
9 Theological Department of Yale University.....	6	24	7,000	0	0	0	115			416,124			73,404	
DISTRICT OF COLUMBIA.														
10 Theological Department of Howard University.....	1		1,000			0								
11 Wayland Seminary.....		2	1,900			6	60	125	70,000	30,000			3,450	
GEORGIA.														
12 Gammon School of Theology.....			6,800		\$3	0	70		75,000	200,000			13,400	180,000

TABLE 65.—*Statistics of Schools of Theology for 1887-88.*—PART II—Continued.

Name.	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	Number of Endowed Pro- fessorships.	Number of Scholarships.	Number of Volumes in Li- brary.	Amount of Matriculation Fee.	Amount of Graduation Fee.	Annual Charge for Tuition to Each Pupil.	Average Cost of Board and Lodging per Annum.	Value of Scientific Appa- ratus.	Value of Grounds and Buildings.	Amount of Permanent Pro- ductive Funds.	Income for Year from Pro- ductive Funds.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources, except Charges for Board and Lodging.	Benefactions.
2	17	18	19	20	21	22	23	24	25	26	27	28	29	30
MAINE.														
47 Bangor Theological Seminary	4	3	16,000	0	0	0	\$90	0	\$65,000	\$209,000	\$14,200	0	\$14,200	\$2,529
48 Cobb Divinity School (Bates College)	1		3,200	0	0	0								
MARYLAND.														
47 Centenary Biblical Institute		2	1,800				60	\$150	30,000	17,500	700		8,500	8,500
48 Theological Seminary of St. Sulpice and St. Mary's University		1	26,000			(\$175)			300,000					
49 Mt. St. Mary's Ecclesiastical Seminary	0	0	10,000	0	0	(200)		8,000	150,000	0	0			
50 Scholasticate of the Congregation of the Most Holy Redeemer, Mt. St. Clement	0	0	12,000					500	100,000	0	0			
51 Westminster Theological Seminary	0	0	1,200			\$55	125		5,000			\$1,000	2,500	1,033
MASSACHUSETTS.														
52 Andover Theological Seminary	9		45,669	0	0	0	146		225,000	825,000			55,909	
53 Boston University School of Theology	1	2	17,783	\$10	\$50	50	246					1,010	36,675	
54 Divinity School of Harvard University	4	10	5,000		0	0	160		300,000	125,000	6,000	0	14,000	10,000
55 Episcopal Theological School		0					135							1,000
56 Tufts College Divinity School	2	1							128,769	465,367	21,806	0	21,806	
57 Newton Theological Institution	1	38	18,000	0	0	0	140	0	0	31,370	1,569	0	4,506	
58 New Church Theological School	0	0	500	0	0	0								
MICHIGAN.														
59 School of Theology (Adrian College)*														
60 Theological Department of Hillsdale College	4			\$3		0							3,814	

TABLE 65.—Statistics of Schools of Theology for 1887-88.—PART II—Continued.

Name.	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	Number of Endowed Professors.	Number of Scholarships.	Number of Volumes in Library.	Amount of Matriculation Fee.	Amount of Graduation Fee.	Annual Charge for Tuition to Each Pupil.	Average Cost of Board and Lodging per Annum.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for Year from Productive Funds.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources, except Charges for Board and Lodging.	Benefactions.
NORTH CAROLINA—continued.														
91 Theological Department of Shaw University	0	3	.....	\$10	\$5	\$8	.....	.....	.....	.....	.....	.....	.....	.....
92 Theological Department of Livingston College	0	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
93 Theological Department of Trinity College.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
OHIO.														
94 Theological Department of German Wallace College*	0	0	8,500	0	0	0	250	.....	\$30,000	\$60,000	\$18,000	0	\$18,000	\$20,000
95 Hebrew Union College	0	0	15,000	0	0	0	150	.....	150,000	250,000	150,000	0	20,000	10,000
96 Lane Theological Seminary	4	20	.....	0	0	0	.....	.....	75,000	.....	.....	.....	10,000	.....
97 St. Mary's Theological Seminary .....	.....	.....	4,000	0	0	0	100	.....	100,000	.....	.....	.....	.....	5,000
98 German Lutheran Seminary	0	0	1,200	0	0	0	75	.....	30,000	75,000	4,685	.....	4,745	14,000
99 Union Biblical Seminary	0	0	7,500	.....	.....	.....	300	.....	.....	.....	.....	.....	.....	.....
100 Theological Seminary of the Protestant Episcopal Church in the Diocese of Ohio.	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
101 Department of Theology, Oberlin College	0	4	10,000	.....	.....	0	85	.....	150,000	180,000	12,000	.....	12,000	.....
102 Wittenberg Seminary*	5	.....	.....	.....	.....	.....	110	.....	25,000	25,000	2,211	.....	4,211	.....
103 Heidelberg Theological Seminary .....	.....	.....	.....	.....	.....	.....	75	.....	15,000	70,000	5,000	0	5,000	1,000
104 United Presbyterian Theological Seminary of Xenia..	3	0	.....	0	0	0	.....	.....	.....	.....	.....	.....	.....	.....
PENNSYLVANIA.														
105 Theological Seminary of the Reformed Presbyterian Church.	3	0	3,050	0	0	0	130	0	25,000	56,500	3,000	0	6,500	9,228
106 Theological Seminary of the United Presbyterian Church.	5	0	.....	0	0	0	105	.....	75,000	124,500	7,500	.....	8,573	3,000
107 Western Theological Seminary of the Presbyterian Church.	5	39	20,000	0	0	0	140	0	165,000	478,586	27,937	0	31,788	7,748

List of Schools of Theology from which no Information has been Received.

Location.	Name.
Santa Barbara, Cal.....	Franciscan College.
Macon, Ga.....	Theological Department of Mercer University.
Carlinville, Ill.....	Theological Department of Blackburn University.
Galena, Ill.....	Theological Department of German English College.
Louisville, Ky.....	Preston Park Theological Seminary.
New Orleans, La.....	Theological Department of Straight University.
New Orleans, La.....	Theological Seminary.
Dry Grove, Miss.....	Bishop Green Associate Mission and Training School.
Geneva, N. Y.....	De Lancey Divinity School.
Carthage, Ohio.....	St. Charles Borromeo Theological Seminary.
Wilberforce, Ohio.....	Theological Seminary of Wilberforce University.
Lincoln University, Pa.....	Theological Department of Lincoln University.
Philadelphia, Pa.....	Divinity School of the Protestant Episcopal Church in Philadelphia.
Tehuacana, Tex.....	Theological Department of Trinity University.
Madison, Wis.....	Luther Seminary.

Memoranda to Table 65.

Location.	Name.	Remarks.
Louisville, Ky.....	Theological Seminary of the Protestant Episcopal Church in the Diocese of Kentucky.	Closed.
Woodstock, Md.....	Woodstock College.....	Mail returned.
Jackson, Miss.....	Jackson College.....	Transferred to Table 33.
Newburg, N. Y.....	Newburg Theological Seminary.....	Suspended.
Conover, N. C.....	Theological Department of Concordia College.....	Not in operation at present.
Orangeburg, S. C.....	Baker Theological Institute, Claflin University.....	Suspended during 1887-88.
Marshall, Tex.....	Theological Department of Bishop College.....	Not in operation at present.

II.—SCHOOLS OF LAW.

The following is a statement of the number of schools of law reporting to this Bureau each year from 1878 to 1888, inclusive (1883 omitted), with the number of instructors and number of students:

	1878.	1879.	1880.	1881.	1882.	1884.	1885.	1886.	1887.	1888.
Number of institutions.....	50	49	48	47	48	47	49	49	50	49
Number of instructors.....	196	224	229	229	249	269	285	283	310	293
Number of students.....	3,012	3,019	3,134	3,227	3,079	2,686	2,744	3,054	3,185	3,667

TABLE 66.—Summary of Statistics of Schools of Law for 1887-88.

States.	Professors and Instructors.		Students.				Number of Degrees Conferred in Course in 1887-88.	Number of Endowed Professorships.	Number of Scholarships.	Number of Volumes in Library.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for Year from Productive Funds.	Amount of State or Municipal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.	
	Resident.	Non-Resident.	Total Number.	Total Number.	Number Holding Degrees in Letters or Science.	Number of Graduates in 1887-88.												
Number of Schools.	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Alabama.....	1			3	21	12	18											
Arkansas.....	1			7	20	31	25											
California.....	1	3	0	3	69	37	39											
Connecticut.....	1	18	0	18	94	37	39											
District of Columbia.....	4	17	1	20	361	49	213	1		8,500	\$18,000	\$37,039	\$700		\$7,015	\$7,715		
Georgia.....	2	3	6	11	22	19	19	0		250					6,385	6,385		
Illinois.....	4	23	23	23	221	28	73	0		500					11,905	11,905	\$50	
Indiana.....	2	8	0	8	63	17	73	0										
Iowa.....	2	10		17	100	20	52	0		3,000					4,752	4,752		
Kansas.....	1			4	33	3	11	0							2,500	2,500		
Kentucky.....	1	3	0	3	43	14	21	0										
Louisiana.....	1	4	0	4	60	17	28	0										
Maryland.....	1	7	0	7	101	28	28	0		828	6,000				8,390	9,114		
Massachusetts.....	2			33	356	200	60	4	15	22,080					31,263	43,153		
Michigan.....	1			8	342	56	144	0		3,765					1,150	1,150		
Mississippi.....	1			1	23	2	15	0		1,500					4,000	4,000		
Missouri.....	2	7	0	16	121	25	53	0		3,500					13,736	13,911	725	
New York.....	6	41	7	53	686	24	220	0		16,700	30,000							
North Carolina.....	1			2	26	12	220	0										
Ohio.....	1	5	0	5	150	37	55	0	20	4,030					8,840	15,690	0	
Oregon.....	1	5	0	5	24	5	8	0		1,045					990	1,990		
Pennsylvania.....	2	9	0	9	144	42	58	0	1	3,045								
South Carolina.....	1	5	0	5	144	42	58	0	1						500	2,000		
Tennessee.....	1	1	2	3	181	27	4	4	6						3,118	3,118		
Texas.....	3	6	11	88	73	73	73	0		79								
Texas.....	1			2	73	1	36	4										
Virginia.....	1			147	1	3	36	0	3	3,000								
West Virginia.....	2			2	20	3		0										
Wisconsin.....	1	6	0	6	88	20	42	36	0	3,000					3,400	3,400	0	
Wisconsin.....	1							42		1,809	0	0	0					
Total.....	49	178	23	293	3,667	662	1,299	1,301	5	49	79,486	54,000	37,039	700	1,000	108,014	134,153	775

TABLE 67.—Statistics of Schools of Law for 1887-88.—PART I.

Location.	Name.	President or Dean.	Date of Charter.	Year of First Opening.	Professors and Instructors.		Students.			Number of Degrees Conferred in Course in 1887-88.	Are the Graduates of Your School Admitted to Practice in the State without Further Examination?	Is There any Examination for Admission?	Number of Years in Course.	Number of Weeks in Scholastic Year.	
					Resident.	Non-Resident.	Total.	Total Number.	Number Holding Degrees in Letters or Science.						Number of Graduates in 1887-88.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 University, Ala.....	Law School of the University of Alabama.	Henry D. Clayton, LL. D.....	1832	1873	.....	.....	3	21	12	18	18	Yes.....	.....	1	38
2 Little Rock, Ark.....	College of Law, Little Rock University.	Rev. Alfred Noon, A. M.....	1883	1883	.....	7	7	20	.....	.....	.....	.....	.....	.....	.....
3 San Francisco, Cal....	Hastings College of Law (University of California).	Robert P. Hastings, LL. B., dean.	1878	1878	3	0	3	69	31	25	25	Yes.....	Yes.	3	36
4 New Haven, Conn....	Law Department of Yale University.	Hon. Francis Wayland, LL. D., dean.	.....	1824	18	0	18	94	37	39	39	Yes.....	Yes.	2	.....
5 Washington, D. C.....	Columbian University Law School..	James C. Welling, LL. D.....	1821	1864	.....	.....	6	206	.....	76	76	No.....	No..	2	38
6 Washington, D. C.....	Law Department of Georgetown University.*	C. W. Hoffman, LL. D.....	.....	1870	11	0	11	.....	.....	64	64	No.....	No..	3	.....
7 Washington, D. C.....	Law Department of Howard University.	Rev. William W. Patton, D. D., LL. D.	1867	1870	.....	.....	5	17	.....	6	6	No.....	.....	2	.....
8 Washington, D. C.....	National University Law Department.	Campbell W. Bushnell, treasurer.	1870	1870	6	1	7	138	49	67	67	No.....	No..	3	33
9 Athens, Ga.....	Law Department in University of Georgia.	Andrew J. Cobb, A. B., B. L., secretary.	1859	1860	3	6	9	22	.....	19	19	Yes.....	No..	1	38
10 Oxford, Ga.....	Law Department of Emory College..	Hon. J. M. Pace, A. M., professor.	1837	1837	.....	.....	2	.....	.....	.....	.....	.....	.....	1	40
11 Bloomington, Ill.....	Bloomington Law School (Illinois Wesleyan University).	Hon. Reuben M. Benjamin, LL. D., dean.	1853	1874	7	0	7	29	.....	13	13	Yes.....	No..	2	36
12 Chicago, Ill.....	Union College of Law of Chicago and North-Western Universities.	Henry Booth, LL. D.....	1858	1859	5	0	5	168	28	50	50	Yes.....	Yes..	2	36
13 Lebanon, Ill.....	Law Department of McKendree College.	H. H. Horner, A. M., dean.....	1835	1860	1	.....	1	9	.....	7	7	.....	.....	2	39

TABLE 67.—Statistics of Schools of Law for 1887-88.—PART I—Continued.

Location.	Name.	President or Dean.	Date of Charter.	Year of First Opening.	Professors and Instructors.			Students.			Number of Degrees Conferred in Course in 1887-88.	Are the Graduates of Your School Admitted to Practice in the State without Further Examination?	Is There any Examination for Admission?	Number of Years in Course.	Number of Weeks in Scholastic Year.
					Resident.	Non-Resident.	Total.	Total Number.	Number Holding Degrees in Letters or Science.	Number of Graduates in 1887-88.					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
41 Columbia, S. C.....	School of Law of South Carolina College.	John M. McBryde, Ph.D., LL.D.	.....	1864	1	0	1	21	16	.....	.....	Yes.....	.....	2	.....
42 Lebanon, Tenn.....	Law School of Cumberland University.	Nathan Green, LL.D., chancellor.	1842	1847	2	0	2	56	.....	56	56	Yes.....	.....	1	40
43 Nashville, Tenn.....	Law Department of Central Tennessee College.	Rev. John Braden, D.D.....	1876	1880	.....	.....	5	5	.....	2	2	Yes.....	Yes..	2	36
44 Nashville, Tenn.....	Law Department of Vanderbilt University.	L. C. Garland, A. M., LL.D., chancellor.	1872	1874	4	0	4	27	.....	15	15	Yes.....	No..	2	36
45 Austin, Tex.....	Law Department, University of Texas.	Leslie Waggoner, M.A., LL.D., chairman.	.....	1883	.....	.....	2	73	.....	4	4	No.....	Yes..	2	36
46 Lexington, Va.....	School of Law and Equity, Washington and Lee University.	Gen. G. W. C. Lee.....	1782	1867	.....	.....	.....	29	1	9	9	.....	.....	.....	.....
47 University of Virginia, Va.	Law School, University of Virginia.	William M. Thornton, chairman.	1819	1825	.....	.....	2	118	.....	27	27	No.....	No..	.....	.....
48 Morgantown, W. Va..	Law Department of West Virginia University.	E. M. Turner, A. M.....	1867	1867	.....	.....	2	20	3	.....	.....	Yes.....	Yes..	1	.....
49 Madison, Wis.....	Law Department, University of Wisconsin.*	Hon. I. C. Sloan.....	.....	1863	6	0	6	88	.....	42	42	Yes.....	No..	2	.....

* Statistics of 1896-97.

TABLE 67.—Statistics of Schools of Law for 1887-88.—PART II.

Name.	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	Number of Endowed Professors.	Number of Scholarships.	Number of Volumes in Library.	Amount of Matriculation Fee.	Amount of Graduation Fee.	Annual Charge for Tuition to Each Pupil.	Average Cost of Board and Lodging per Annum.	Value of Grounds and Buildings.	Amount of Permanent Pro-ductive Funds.	Income for Year from Pro-ductive Funds.	Amount of State or Municipal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.
1 Law School of the University of Alabama.....					\$3	\$50	\$108							
2 College of Law, Little Rock University.....					5	0	0							
3 Hastings College of Law, University of California.....					5	100	180							
4 Law Department of Yale University.....	1		8,500		2	80	200		\$37,039	\$700		\$7,015	\$7,715	
5 Columbian University Law School.....						80								
6 Law Department of Georgetown University*.....					5	40	240							
7 Law Department of Howard University.....					6	75		\$18,000	0	0		6,355	6,355	
8 National University Law Department.....	0	0	250	0	3	80								
9 Law Department in University of Georgia.....	0	0	500	0	6	100								
10 Law Department of Emory College.....	0	0			5	60								
11 Bloomington Law School (Illinois Wesleyan University).....	0	0	0		10	90		0	0	0	0	11,105	11,105	\$50
12 Union College of Law of Chicago and North-Western Universities.....														
13 Law Department of McKendree College.....	0	0				21								
14 Law Department of Chadwick College*.....						60							800	
15 Law Department of Delhany University.....	0	0		\$10	5	40								
16 Law Department of University of Notre Dame.....	0	0												
17 Iowa College of Law (Irvine University).....	0	0			7	50	130							
18 Law Department, State University of Iowa.....	0	0	3,000	25	5	25	140					4,792	4,792	0
19 Law School of University of Kansas.....	0	0				80	112					2,500	2,500	
20 Law Department of University of Louisville.....					0	80								
21 Law Department of Tulane University.....			828	1	0	80	175	6,000				8,380	9,114	
22 School of Law of the University of Maryland.....	0	10			10	100	200							
23 Boston University School of Law.....	4	5	22,980		10	150								
24 Law School of Harvard University.....	0	0	9,765	\$10	10	625						31,293	45,153	
25 Law Department of University of Michigan.....	0	0	1,500		10	50	135					1,150	1,150	
26 Department of Law, University of Mississippi.....	0	0												

* Statistics of 1886-87.

b For residents; \$35 for non-residents.

TABLE 67.—Statistics of Schools of Law for 1887-88.—PART II—Continued.

Name.	2	17	18	19	20	21	22	23	24	25	26	27	28	29	30
		Number of Endowed Professors.	Number of Scholarships.	Number of Volumes in Library.	Amount of Matriculation Fee.	Amount of Graduation Fee.	Annual Charge for Tuition to Each Pupil.	Average Cost of Board and Lodging per Annum.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for Year from Productive Funds.	Amount of State or Municipal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources, except Charges for Board and Lodging.	Benefactions.
27 Law Department, State University of Missouri.....	0	1	3,500			\$5	\$50	\$10					\$4,000	\$4,000	
28 St. Louis Law School, Washington University* ..	0	0	1,200			10	130	175	\$30,000			0	5,788	5,788	
29 Albany Law School (Union University).....	0	0	0			0	100	200	0	0	0	0	1,443	1,623	\$175
30 Buffalo Law School of Niagara University.....	0	0	5,000			0	60								
31 Law School of Hamilton College*.....			4,500												
32 Law Department of Cornell University.....				\$5	25		150								
33 Columbia College Law School.....			6,000				100						6,500	6,500	550
34 Department of Law, University of the City of New York.....							40-50								
35 University Law School, University of North Carolina.....	0	20	4,030	0	5	10	75	150				\$1,000	8,840	15,590	0
36 Law School of the Cincinnati College.....	0	1	45				60		0	0	0		990	1,990	
37 Law School of the University of Oregon.....	0	1	3,000				50								
38 College of Law, Willamette University*.....				5			100								
39 Law Department, University of Pennsylvania.....	0	1													
40 Law Department of Allen University.....			6			5	50	40					500	2,000	
41 School of Law of South Carolina College.....	0			10	6	5	50	40							
42 Law School of Cumberland University.....	0			5	5		100	80					3,000	3,000	
43 Law Department of Central Tennessee College.....	0	0	79				30	90					118	118	
44 Law Department of Vanderbilt University.....	0	0					100	145							
45 Law Department, University of Texas.....				20			0							1,460	
46 School of Law and Equity, Washington and Lee University.....	0	1	3,000												
47 Law School, University of Virginia.....															
48 Law Department of West Virginia University.....	0	2		25	15		80	123							
49 Law Department, University of Wisconsin*.....			1,800				24	125					3,400	3,400	0

* Statistics of 1886-87.

a Department of the University of South Carolina.

b Fifty dollars for the first year and \$25 for the second year.

Memoranda to Table 67.

Location.	Name.	Remarks.
Macon, Ga.....	Law Department of Mercer University.....	No information received.
New Orleans, La.....	Law Department of Straight University.....	No information received.
Greensborough, N. C.....	Greensborough Law School.....	Discontinued.

III.—SCHOOLS OF MEDICINE, DENTISTRY, AND PHARMACY.

The following is a comparative statement of the number of schools of medicine, dentistry, and pharmacy reported to this Office each year from 1873 to 1888, inclusive (1883 omitted), with the number of instructors and students:

	1873.	1879.	1880.	1881.	1882.	1884.	1885.	1886.	1887.	1888.
Number of institutions.....	106	114	120	126	134	145	152	175	178	175
Number of instructors	1,337	1,495	1,660	1,746	1,946	2,235	2,514	2,829	2,936	3,007
Number of students.....	11,830	13,321	14,006	14,536	15,151	15,300	13,921	16,407	16,366	18,513

TABLE 68.—Summary of Statistics of Schools of Medicine, of Dentistry, and of Pharmacy, for 1887-88.

States.	Number of Schools.	Professors and Instructors.			Students.			Number of Degrees Conferred in Course in 1887-88.	Number of Endowed Professorships.	Number of Scholarships.	12	13	14	15	16	17	18	19	20
		Resident.	Non-Resident.	Total Number.	Total Number.	Number Holding Degrees in Letters or Science.	Number of Graduates in 1887-88.												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
I. MEDICAL AND SURGICAL.																			
1. Preparatory.																			
1	1	9	0	9	17	5	.....	0	0	0	200	\$300	0	0	0	0	\$754	\$754	0
Total.....	1	9	0	9	17	5	.....	0	0	0	200	300	0	0	0	0	754	754	0
2. Regular.																			
2	1	10	1	11	92	.....	31	31	0	47	300	50,000	\$75,000	.....	.....	.....	3,860	5,075	.....
3	1	14	.....	14	67	.....	20	20	0	0	.....	.....	16,000	0	0	0	11,450	11,450	\$15
4	3	60	1	61	188	20	30	30	0	0	781	5,000	100,000	0	0	0	2,995	6,753	.....
5	2	28	.....	28	43	.....	7	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6	1	19	0	19	26	6	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7	4	71	0	71	292	13	63	63	8	.....	.....	6.0	.....	.....	.....	.....	.....	.....	.....
8	3	33	0	33	290	.....	132	132	10	13,000	12,000	12,000	65,000	.....	.....	.....	13,700	18,400	150
9	3	132	2	134	824	68	236	236	3	500	8,800	8,800	220,000	3,000	150	.....	25,069	30,244	.....
10	5	47	6	53	13	4	45	43	0	0	1,295	3,300	17,000	.....	.....	.....	4,500	4,500	.....
11	3	34	3	37	279	27	118	118	.....	.....	1,100	500	50,000	.....	.....	.....	7,400	7,500	.....
12	3	56	0	56	783	.....	285	285	1	5,000	1,000	1,000	164,000	.....	.....	.....	.....	.....	.....
13	1	11	0	11	274	.....	73	73	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
14	1	10	0	10	85	16	21	21	0	0	4,000	1,500	215,000	.....	.....	.....	6,973	6,973	.....
15	3	86	0	86	601	40	208	208	.....	.....	.....	.....	.....	.....	.....	.....	39,380	65,327	550

16	Massachusetts.....	2	6	68	396	140	76	76	4	6	1,535	500	50,000	5,000	.....	55,610	70,630	.....	0
17	Michigan.....	2	34	50	443	18	78	78	0	0	3,947	.....	40,000	.....	.....	0	9,350	.....	0
18	Minnesota.....	2	77	10	154	91	23	23	.....	.....	2,980	5,290	40,000	.....	.....	6,250	6,250	.....	0
19	Missouri.....	9	161	4	105	680	39	211	211	2	1,650	12,400	148,500	.....	.....	31,768	31,768	.....	0
20	Nebraska.....	1	13	3	16	30	8	8	0	0	2,000	.....	20,000	2,000	.....	0	4,500	4,500	6,000
21	New Hampshire.....	1	4	10	7	7	30	30	0	0	6,500	45,500	527,000	.....	140	0	.....	.....	0
22	New York.....	8	209	32	2,283	62	516	516	1	5	.....	.....	.....	.....	.....	1,500	4,010	5,549	.....
23	North Carolina.....	1	117	33	7	39	238	238	.....	.....	3,100	3,600	482,500	6,000	300	.....	10,500	11,820	.....
24	Ohio.....	9	117	33	745	33	238	238	.....	.....	3,100	3,600	482,500	6,000	300	.....	10,500	11,820	.....
25	Oregon.....	1	12	0	12	23	5	5	0	0	1,500	4,000	35,000	0	0	0	2,300	2,450	0
26	Pennsylvania.....	15	155	46	201	1,414	259	389	2	10	1,350	8,000	110,000	45,000	4,000	0	24,822	30,437	1,500
27	South Carolina.....	1	12	0	64	.....	17	17	0	6	.....	1,000	20,000	.....	.....	0	3,000	3,500	0
28	Tennessee.....	4	51	0	61	631	5	229	0	27	1,151	4,000	47,000	.....	.....	20,577	25,951	.....	0
29	Vermont.....	2	1	1	26	205	13	13	0	0	.....	.....	.....	.....	.....	.....	.....	.....	.....
30	Virginia.....	2	22	0	129	.....	37	37	0	2	.....	2,000	100,000	.....	.....	1,500	4,010	5,549	.....
	Total.....	83	1,402	158	11,172	885	3,147	3,145	7	127	48,969	167,500	2,549,000	100,145	7,408	22,140	287,014	357,817	8,215
3. <i>Eclectic.</i>																			
31	Georgia.....	1	7	0	7	59	12	22	.....	6	500	3,000	15,000	.....	.....	3,000	3,000	.....	.....
32	Illinois.....	1	21	0	21	127	33	41	.....	.....	300	500	75,000	.....	.....	10,000	10,000	.....	.....
33	Indiana.....	1	7	5	12	24	3	10	0	10	.....	.....	.....	.....	.....	600	600	.....	.....
34	Iowa.....	2	24	10	34	154	2	47	47	.....	.....	.....	25,000	.....	.....	.....	.....	.....	.....
35	Missouri.....	1	15	0	15	49	13	13	.....	.....	.....	5,000	1,000	.....	.....	4,000	6,500	.....	.....
36	New York.....	1	17	3	20	63	9	11	0	.....	700	5,000	45,000	.....	.....	17,500	17,500	2,000	0
37	Ohio.....	2	19	4	23	267	.....	76	76	0	.....	2,100	80,000	.....	.....	.....	.....	.....	.....
	Total.....	9	110	22	132	743	109	220	.....	16	1,509	10,600	242,000	.....	.....	35,100	37,600	2,000	.....
4. <i>Homoeopathic.</i>																			
38	California.....	1	19	1	20	21	0	9	9	0	1,300	2,000	0	0	0	2,000	3,000	.....	0
39	Illinois.....	2	40	2	42	315	22	125	125	0	600	3,000	125,000	.....	.....	16,500	20,500	.....	.....
40	Iowa.....	1	.....	.....	.....	32	0	.....	.....	.....	.....	.....	.....	.....	.....	1,308	1,308	.....	.....
41	Massachusetts.....	1	40	.....	38	110	25	39	0	10	.....	.....	.....	.....	.....	.....	.....	.....	.....
42	Michigan.....	1	.....	.....	5	76	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
43	Missouri.....	1	13	0	13	44	18	18	0	7	.....	.....	18,000	.....	.....	2,800	2,800	.....	.....
44	New York.....	2	49	0	49	179	13	57	57	.....	2,000	1,000	112,000	.....	.....	12,726	14,714	.....	.....
45	Ohio.....	2	23	2	25	157	22	64	64	0	3,500	3,300	50,000	.....	.....	10,000	10,000	100	.....
46	Pennsylvania.....	1	22	1	23	184	11	48	48	0	6,400	10,000	240,000	125,000	6,300	25,000	17,188	49,427	15,000
	Total.....	12	166	6	224	1,118	99	360	361	24	13,800	20,300	433,000	125,000	6,300	25,000	50,886	87,125	15,100
5. <i>Physio-Medical.</i>																			
47	Illinois.....	1	5	6	11	15	.....	5	5	0	.....	250	0	0	0	1,100	1,200	200	.....
48	Indiana.....	1	6	6	12	26	20	8	8	.....	150	4,000	.....	.....	.....	.....	.....	.....	.....
	Total.....	2	11	12	23	41	20	13	13	.....	150	4,250	.....	.....	.....	1,100	1,300	250	.....

TABLE 68.—Summary of Statistics of Schools of Medicine, of Dentistry, and of Pharmacy, for 1887-88.—Continued.

States.	Number of Schools.	Professors and Instructors.			Students.			Number of Degrees Conferred in Course in 1887-88.	Number of Endowed Professorships.	Number of Scholarships.	Number of Volumes in Library.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for Year from Productive Funds.	Amount of State or Municipal Aid Received Within the Year.	Amount of Receipts Within the Year from Tuition Fees.	Income for Year from all Sources, except Charges for Board and Lodging.	Benefactions.
		Resident.	Non-Resident.	Total Number.	Total Number.	Number Holding Degrees in Letters or Science.	Number of Graduates in 1887-88.												
1	6	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
6. Graduate.																			
49	1	10	0	10	35	.....	14	0	.....	.....	0	\$1,000	\$53,000	.....	.....	.....	\$630	\$630	0
50	1	10	16	26	24	24	24	.....	.....	.....	2,000	2,500	75,000	.....	.....	.....	1,100	1,100	.....
51	2	145	.....	145	662	.....	325	.....	0	0	.....	.....	.....	.....	.....	.....	19,000	19,000	.....
52	2	27	0	27	69	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total																			
II. DENTAL.																			
53	1	.....	.....	25	36	0	12	12	0	0	.....	.....	.....	.....	.....	.....	.....	.....	.....
54	2	2	0	2	18	.....	8	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
55	3	68	17	85	207	15	64	65	0	0	140	6,000	20,000	\$10,000	.....	15,029	26,187	2,950	\$250
56	1	6	0	6	30	.....	17	17	0	0	.....	500	.....	.....	.....	.....	2,950	3,965	.....
57	1	.....	.....	7	53	0	20	20	0	0	.....	.....	.....	.....	.....	.....	4,021	4,021	.....
58	1	13	8	21	25	.....	4	4	0	1	0	1,000	14,000	0	0	0	.....	.....	0
59	2	39	30	69	223	38	104	104	10	100	200	10,000	.....	.....	.....	.....	10,000	10,000	.....
60	2	15	.....	39	97	4	14	14	.....	.....	428	.....	.....	.....	.....	.....	5,380	7,763	90
61	1	5	0	5	104	3	37	37	0	0	.....	.....	.....	.....	.....	.....	.....	.....	.....
62	2	28	.....	28	30	2	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
63	2	27	2	29	59	.....	21	21	0	0	.....	.....	.....	.....	.....	.....	1,120	1,120	.....
64	1	32	4	36	211	6	72	72	0	0	.....	.....	.....	.....	.....	.....	5,170	5,070	.....
65	1	10	3	13	126	.....	46	46	.....	.....	.....	2,100	.....	.....	.....	.....	22,985	22,985	.....
66	2	49	0	49	283	5	114	114	0	1	300	600	12,000	.....	.....	.....	15,000	18,000	.....

67	Tennessee	3	27	8	35	86	1	58	58	600	46,000	10,000	200	290	710
	Total	25	321	72	449	1,588	74	595	596	21,300	46,000	10,000	81,735	99,311	1,050
III. PHARMACEUTICAL.															
68	California	1	4	0	4	83	1	14	14	500	10,000	0	2,778	2,778	25
69	District of Columbia	2	5	0	5	83		35	35	500	5,000	0	2,800	3,263	0
70	Illinois	2	13	0	13	473	2	94	95	5,000	70,000	0	19,000	19,000	0
71	Indiana	1	5	1	6	27		4	4						
72	Iowa	2	3	1	9	27	2	3	3	300			300	300	
73	Kansas	1	7	0	7	40		10	10						
74	Kentucky	2	8	0	8	74	21	15	16	15,500	7,000	0	2,000	2,000	500
75	Louisiana	1	3	0	3	31		10	10	300	35,000	0	6,000	6,389	0
76	Maryland	1	3	1	4	143	0	40	40	20,000	65,000	0	8,300	13,200	2,000
77	Massachusetts	1	4	0	4	252	6	23	23	300					0
78	Michigan	1	1	0	9	90	4	23	23	8,000			8,000	8,000	0
79	Minnesota	1	4	0	4	14	0	5	5	2,700	53,800	0	17,691	19,020	200
80	Missouri	2	10	0	10	177		51	51	1,000	15,000		5,000	5,000	
81	New York	3	13	1	16	405		116	110	4,200	120,000	1,500		90	
82	Ohio	1	5	1	6	125		23	23						
83	Pennsylvania	2	10	0	10	585	1	191	194						
84	Tennessee	1	10	0	10	44		5	5						
85	Wisconsin	1	4	0	4	47		14	14						
	Total	26	111	7	132	2,721	37	692	691	62,600	381,300	1,500	71,869	79,040	2,725
IV. VETERINARY.															
86	Illinois	1	0	11	11	55		21	21	2,000	22,000		7,500	7,500	
87	Massachusetts	1			26	0		1	1				2,611	14,662	
88	Minnesota	1	4	2	6	4		0	0	350			400	400	
89	New York	2	32	0	32	180	0	45	45				12,657	12,657	0
90	Pennsylvania	1	17	0	17	58	0	14	14						
	Total	6	53	13	84	323		81	81	2,350	22,000		23,168	35,219	
TOTALS.															
91	Preparatory	1	9	0	9	17	5		0	300	0	0	754	754	0
92	Regular	88	1,492	158	1,746	11,172	865	3,147	3,145	167,500	2,519,000	100,145	287,014	357,817	8,215
93	Federic	9	110	22	132	743	109	220	220	10,600	242,000		35,100	37,600	2,000
94	Homoeopathic	12	165	6	224	1,118	99	360	361	20,300	433,000	125,000	50,886	87,125	15,100
95	Physio-medical	2	11	12	23	41	20	13	13	4,250	108,000		1,100	1,300	200
96	Graduate	6	192	16	208	790	26	363		3,700	108,000		20,730	20,730	
97	Dental	25	321	72	449	1,588	74	595	596	21,300	46,000	10,000	81,735	99,311	1,050
98	Pharmaceutical	26	111	7	132	2,721	37	692	691	62,600	381,300	1,500	71,869	79,040	2,725
99	Veterinary	6	53	13	84	323		81	81	2,350	22,000		23,168	35,219	
100	Grand total	175	2,465	306	3,007	18,513	1,235	5,471	5,107	292,900	3,781,300	236,615	572,376	718,806	29,290

TABLE 69.—*Statistics of Schools of Medicine, of Dentistry,*

Location.	Name.	President or Dean.
1	2	3
I.—MEDICAL AND SURGICAL.		
1. Preparatory.		
1 Portland, Me.....	Portland School for Medical Instruction.	Israel T. Dana
2. Undergraduate—Regular.		
2 Mobile, Ala	Medical College of Alabama.....	Geo. A. Ketchum, M. D.
3 Little Rock, Ark.....	Medical Department of the Arkansas Industrial University.	Jas. A. Dibrell, Jr., M. D.
4 Los Angeles, Cal	College of Medicine of the University of Southern California.*	J. P. Widney, A. M., M. D., dean ..
5 San Francisco, Cal.....	Cooper Medical College	Henry Gibbons, Jr., M. D.
6 San Francisco, Cal.....	Medical Department of the University of California.	Robert A. McLean, M. D., dean ..
7 Boulder, Colo.....	Medical Department of the University of Colorado.	Horace M. Hale, A. M.
8 Denver, Colo.....	University of Denver, Medical Department.*	J. C. Davis, M. D., dean.....
9 New Haven, Conn.....	Medical Department of Yale University.	Herbert E. Smith, M. D., dean ..
10 Washington, D. C.....	Howard University, Medical Department.	Rev. William W. Patton, D. D., LL. D.
11 Washington, D. C.....	Medical Department of National University. ^a	H. H. Barker, M. D.....
12 Washington, D. C.....	National Medical College (Columbian University).	A. F. A. King, A. M., M. D., dean ..
13 Washington, D. C.....	University of Georgetown, Medical Department.	J. W. H. Lovejoy, M. D.....
14 Atlanta, Ga	Atlanta Medical College	W. S. Kendrick.....
15 Atlanta, Ga	Southern Medical College.....	Wm. Perrin Nicholson, M. D.....
16 Augusta, Ga	Medical College of Georgia (University of Georgia).	Edward Geddings, M. D.....
17 Chicago, Ill.....	Chicago Medical College (North-Western University).	N. S. Davis, M. D., LL. D.....
18 Chicago, Ill.....	College of Physicians and Surgeons of Chicago.	A. Reeves Jackson, A. M., M. D. ..
19 Chicago, Ill.....	Rush Medical College.....	J. Adams Allen, M. D., LL. D.....
20 Chicago, Ill.....	Woman's Medical College of Chicago.	William H. Pyrford, A. M., M. D.....
21 Quincy, Ill.....	Quincy College of Medicine (Chadock College).*	R. J. Christie, M. D., dean.....
22 Fort Wayne, Ind.....	Fort Wayne College of Medicine.....	C. B. Stemen, M. D., dean.....
23 Indianapolis, Ind	Central College of Physicians and Surgeons.	Samuel E. Earp, M. SC., M. D., secretary.
24 Indianapolis, Ind.....	Medical College of Indiana.....	Franklin Hays, M. D., secretary.
25 Des Moines, Iowa.....	Iowa College of Physicians and Surgeons (Drake University).	Lewis Schooler, M. D.....
26 Iowa City, Iowa	Medical Department, State University of Iowa.	Charles A. Schaeffer, PH. D.....
27 Keokuk, Iowa.....	College of Physicians and Surgeons* ..	John H. Craig
28 Louisville, Ky	Hospital College of Medicine (Central University).	Wm. H. Bolling, M. D.....
29 Louisville, Ky.....	Kentucky School of Medicine.....	William H. Wathen, M. D.....
30 Louisville, Ky.....	Louisville Medical College	J. A. Ireland, M. D., dean.....
31 Louisville, Ky.....	University of Louisville, Medical Department.	J. M. Bodine, M. D., dean.....

* Statistics of 1886-87.

and of Pharmacy, for 1887-88.—PART I.

Date of Charter.	Year of First Opening.	Professors and Instructors.			Students.			Number of Degrees Conferred in Course in 1887-88.	Are the Graduates of Your School Admitted to Practice in the State without Further Examination?	Is there any Examination for Admission?	Is a Knowledge of Medical Botany Required for a Diploma?	Is Chemical Laboratory Work Obligatory upon Students?	Is any Provision made for Instruction in Anatomical Drawing?	Number of Years in Course.	Number of Weeks in Scholastic Year.
		Resident.	Non-Resident.	Total.	Total Number.	Number Holding Degrees in Letters or Science.	Number of Graduates in 1887-88.								
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1853	1853	9	0	9	17	5	.....	0	.....	Yes.....	.....	No	No	3	26
1860	1850	10	1	11	92	.....	31	31	No	No	Yes.....	No	No	3	20
1879	1879	14	.....	14	67	.....	20	20	No	Yes.....	Yes.....	No	No	2	20
.....	1883	21	.....	21	20	3	.....	.....	.....	Yes.....	.....	Yes.....	.....	3	.....
1882	1882	15	1	16	104	13	14	14	Yes.....	Yes.....	No	Yes.....	No	3	20
1868	1872	24	0	24	64	4	16	16	Yes.....	Yes.....	No	Yes.....	No	3	31
.....	1883	8	.....	8	12	.....	1	1	Yes.....	Yes.....	No	Yes.....	No	3	36
.....	1881	20	.....	20	31	.....	2	2	Yes.....	Yes.....	No	No	No	2	.....
1810	1813	19	0	19	26	6	7	7	.....	Yes.....	.....	Yes.....	.....	3	24
1867	1867	10	0	10	90	.....	22	22	Yes.....	Yes.....	.....	.....	.....	3	20
1870	1884	28	0	28	29	.....	14	14	Yes.....	Yes.....	Yes.....	Yes.....	No	3	30
1821	1822	12	0	12	116	12	20	20	Yes.....	Yes.....	Yes.....	Yes.....	No	3	20
.....	1831	21	0	21	47	1	12	12	Yes.....	Yes.....	.....	.....	.....	3	20
1855	1856	11	0	11	114	.....	54	54	Yes.....	No	No	No	No	2	24
1879	1879	11	0	11	82	.....	32	32	No	No	No	Yes.....	No	2	21
1820	1829	11	0	11	103	.....	46	46	Yes.....	No	No .....	.....	.....	3	20
1839	1859	27	0	27	170	36	34	34	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	3	26
1851	1882	31	2	33	162	16	46	46	Yes.....	Yes.....	No	Yes.....	No	3	22
.....	1887	35	.....	35	401	15	135	135	Yes.....	.....	.....	.....	.....	3	.....
1870	1870	26	0	26	78	1	18	18	Yes.....	Yes.....	No	Yes.....	.....	3	30
.....	1881	13	0	13	13	.....	3	3	Yes.....	.....	No	Yes.....	.....	2	.....
1879	1879	8	4	12	27	0	14	12	Yes.....	Yes.....	.....	Yes.....	No	3	22
1870	1870	12	0	12	16	.....	5	5	Yes.....	Yes.....	Yes.....	Yes.....	.....	2	22
1866	1867	27	2	29	72	4	26	26	Yes.....	Yes.....	No	Yes.....	.....	2	22
1882	1882	12	3	15	26	3	8	8	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	3	20
1847	1870	12	0	12	111	4	53	53	Yes.....	Yes.....	No	Yes.....	No	3	20
.....	1849	10	0	10	142	20	57	57	Yes.....	Yes.....	Yes.....	Yes.....	No .....	.....	27
1874	1873	15	0	15	55	.....	21	21	Yes.....	Yes.....	Yes.....	Yes.....	.....	3	20
1850	1850	19	0	19	200	.....	69	69	Yes.....	Yes.....	Yes.....	Yes.....	.....	2	20
1869	1870	8	0	8	274	.....	95	95	Yes.....	Yes.....	.....	Yes.....	.....	3	23
1837	1837	14	0	14	254	.....	100	100	Yes.....	No	No	Yes.....	No	3	26

a Includes statistics of dental department.

TABLE 69.—Statistics of Schools of Medicine, of Dentistry,

Location.	Name.	President or Dean.
1	2	3
	I—MEDICAL AND SURGICAL—Cont'd.	
	1. Undergraduate—Regular—Cont'd.	
32 New Orleans, La.....	Medical Department, Tulane University.	Stanford E. Chaillé, M. D., dean.
33 Brunswick, Me.....	Medical School of Maine, at Bowdoin College.	Rev. William De Witt Hyde, D. D.
34 Baltimore, Md.....	Baltimore Medical College	David Streett, M. D.....
35 Baltimore, Md.....	Baltimore University School of Medicine.	James G. Linthicum, M. D.....
36 Baltimore, Md.....	College of Physicians and Surgeons...	Thomas Opie, M. D.....
37 Baltimore, Md.....	University of Maryland, School of Medicine.	J. Edwin Michael, M. D.....
38 Baltimore, Md.....	Woman's Medical College of Baltimore.	Richard Henry Thomas, M. D., dean.
39 Boston, Mass.....	College of Physicians and Surgeons...	Charles P. Thayer, M. D., registrar.
40 Boston, Mass.....	Harvard University Medical School...	Charles W. Eliot, LL. D
41 Ann Arbor, Mich.....	Department of Medicine and Surgery of the University of Michigan.	Corydon L. Ford, M. D., LL. D., dean.
42 Detroit, Mich.....	Detroit College of Medicine.....	H. O. Walker, M. D., secretary ..
43 Minneapolis, Minn....	Minneapolis College of Physicians and Surgeons.	Edwin Phillips, M. D.....
44 Minneapolis, Minn....	Minnesota Hospital College	F. A. Dunsmoor, M. D.....
45 St. Paul, Minn	St. Paul Medical College*	Alex. J. Stone, M. D., LL. D.....
46 Columbia, Mo.....	Medical Department, University of the State of Missouri.	Samuel S. Laws, LL. D.....
47 Kansas City, Mo.....	Kansas City Medical College	E. W. Schauffler, M. D.....
48 Kansas City, Mo.....	University Medical College	John R. Snell, M. D.....
49 St. Joseph, Mo.....	North-Western Medical College of St. Joseph.	Francis A. Simmons, M. D.....
50 St. Joseph, Mo.....	St. Joseph Medical College.....	Jacob Geiger, M. D.....
51 St. Louis, Mo.....	Beaumont Hospital Medical College* ..	W. B. Outten.....
52 St. Louis, Mo.....	Missouri Medical College.....	T. F. Prewitt, M. D.....
53 St. Louis, Mo.....	St. Louis College of Physicians and Surgeons.	Joseph L. Bauer, M. D.....
54 St. Louis, Mo.....	St. Louis Medical College.....	J. S. B. Alleyne, M. D.....
55 Omaha, Nebr	Omaha Medical College.....	J. C. Denise, M. D.....
56 Hanover, N. H.....	Dartmouth Medical College.....	C. P. Frost, M. D.....
57 Albany, N. Y.....	Albany Medical College (Union University).	Willis G. Tucker, M. D., registrar.
58 Buffalo, N. Y.....	Medical Department of Niagara University.	Alvin A. Hubbell, M. D., secretary.
59 Buffalo, N. Y.....	Medical Department of the University of Buffalo.	Charles Cary, M. D., secretary...
60 New York, N. Y.....	Bellevue Hospital Medical College....	Austin Flint, M. D., LL. D.....
61 New York, N. Y.....	College of Physicians and Surgeons in the City of New York (Columbia College).	John C. Dalton, M. D.....
62 New York, N. Y.....	University of the City of New York, Medical Department.*	Charles Inslee Pardee, M. D., dean.
63 New York, N. Y.....	Woman's Medical College of the New York Infirmary.	Emily Blackwell, M. D.....
64 Syracuse, N. Y.....	College of Medicine of Syracuse University.	Rev. Charles N. Sims, D. D., LL. D., chancellor.
65 Raleigh, N. C.....	Leonard Medical College (Shaw University).	Rev. H. M. Tupper, D. D.....
66 Cincinnati, Ohio.....	Cincinnati College of Medicine and Surgery.	R. C. Stockton Reed, A. M., M. D.

* Statistics of 1886-87.

and of Pharmacy, for 1887-88.—PART I—Continued.

Date of Charter.	Year of First Opening.	Professors and Instructors.			Students.			Number of Degrees Conferred in Course in 1887-88.	Are the Graduates of Your School Admitted to Practice in the State without Further Examination?	Is there any Examination for Admission?	Is a Knowledge of Medical Botany Required for a Diploma?	Is Chemical Laboratory Work Obligatory upon Students?	Is any Provision made for Instruction in Anatomical Drawing?	Number of Years in Course.	Number of Weeks in School for Year.
		Resident.	Non-Resident.	Total.	Total Number.	Number Holding Degrees in Letters or Science.	Number of Graduates in 1887-88.								
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
.....	1894	11	0	11	274	.....	73	73	Yes....	No....	Yes....	Yes....	.....	2	82
1820	1820	10	0	10	85	16	21	21	Yes....	Yes....	.....	.....	.....	3	20 83
1881	1881	16	0	16	50	.....	17	17	Yes....	No....	No....	Yes....	No....	2-3	24 84
.....	1884	15	0	15	31	.....	15	15	Yes....	Yes....	No....	No....	No....	2	25 85
1872	1872	18	0	18	235	.....	91	91	Yes....	No....	Yes....	Yes....	No....	3	24 86
1807	1808	22	0	22	269	40	82	82	Yes....	No....	No....	No....	No....	2	25 87
1882	1882	15	0	15	16	0	3	3	Yes....	Yes....	No....	Yes....	No....	3	23 88
1890	1881	6	6	12	43	4	4	4	No....	Yes....	No....	Yes....	No....	3	24 89
.....	1782	.....	.....	56	263	136	72	72	.....	Yes....	.....	.....	.....	3-4	40
1837	1850	.....	.....	16	313	18	48	48	.....	Yes....	.....	.....	.....	3	25 41
1885	1885	34	0	34	130	.....	30	30	Yes....	Yes....	.....	Yes....	.....	3	25 42
1883	1883	16	0	16	19	.....	2	2	No....	Yes....	Yes....	Yes....	No....	3	26 43
1881	1881	37	10	47	100	94	20	20	No....	Yes....	Yes....	Yes....	Yes....	3	26 44
.....	1878	24	.....	24	35	.....	1	1	No....	Yes....	Yes....	Yes....	.....	3	..... 45
1839	1845	8	0	8	20	.....	.....	.....	.....	.....	.....	.....	.....	2	23 46
1880	1869	19	1	20	48	.....	20	20	Yes....	Yes....	No....	Yes....	No....	2	24 47
1880	1881	15	1	16	38	1	8	8	Yes....	Yes....	Yes....	No....	.....	2	25 48
1881	1881	10	0	10	82	.....	11	11	Yes....	Yes....	Yes....	Yes....	.....	3	20 49
.....	1877	17	.....	17	32	.....	12	12	Yes....	Yes....	.....	.....	.....	3	..... 50
.....	1886	20	.....	20	54	18	18	18	Yes....	Yes....	No....	Yes....	No....	3	..... 51
1840	1840	20	0	20	233	10	81	81	Yes....	Yes....	No....	No....	No....	2	22 52
1879	1879	20	2	22	109	.....	43	43	Yes....	Yes....	No....	Yes....	No....	3	24 53
1841	1842	32	0	32	96	10	18	18	Yes....	Yes....	No....	Yes....	No....	3	22 54
1881	1881	13	3	16	30	.....	8	8	Yes....	Yes....	Yes....	Yes....	No....	3	24 55
1769	1797	4	10	14	71	7	30	30	Yes....	Yes....	No....	Yes....	No....	3	24 56
1839	1839	21	1	22	132	.....	37	37	Yes....	Yes....	No....	No....	.....	3	25 57
.....	1883	20	1	21	49	3	12	12	Yes....	Yes....	No....	Yes....	No....	3	23 58
1846	1846	27	4	31	169	7	44	44	Yes....	No....	No....	Yes....	.....	3	24 59
1861	1861	27	0	27	415	.....	144	144	Yes....	No....	.....	.....	.....	3	24 60
1907	1907	35	0	35	809	.....	115	115	Yes....	.....	.....	.....	.....	3	20 61
.....	1841	56	.....	56	631	46	151	151	Yes....	Yes....	Yes....	Yes....	.....	3	..... 62
1863	1863	0	26	26	52	6	4	4	Yes....	Yes....	Yes....	Yes....	.....	3	22 63
1875	1872	23	0	23	32	.....	9	9	.....	.....	.....	.....	.....	3	..... 64
.....	1865	7	.....	7	39	.....	.....	.....	No....	Yes....	Yes....	Yes....	.....	4	..... 65
1881	1881	18	7	25	50	2	15	15	Yes....	Yes....	No....	Yes....	Yes....	4	22 66

TABLE 69.—Statistics of Schools of Medicine, of Dentistry,

Location.		Name.	President or Dean.
1		2	3
		I—MEDICAL AND SURGICAL—Cont'd.	
		2. Undergraduate—Regular—Cont'd.	
67	Cincinnati, Ohio.....	Medical College of Ohio.....	W. W. Seely, A. M., M. D.....
68	Cincinnati, Ohio.....	Miami Medical College.....	J. C. Mackenzie, M. D., secretary.
69	Cleveland, Ohio.....	Medical Department of the University of Wooster.	F. J. Weed, M. D.....
70	Cleveland, Ohio.....	Western Reserve University, Medical Department.*	G. C. E. Weber, M. D., LL. D., dean.
71	Columbus, Ohio.....	Columbus Medical College.....	D. N. Kinsman, M. D.....
72	Columbus, Ohio.....	Starling Medical College.....	Thos. C. Hoover, M. D., registrar.
73	Toledo, Ohio.....	North-Western Ohio Medical College	G. A. Collamore, A. B., M. D., dean.
74	Toledo, Ohio.....	Toledo Medical College.....	Hon. Henry Kahlo.....
75	Portland, Oregon.....	Medical Department, Willamette University.	E. P. Fraser, M. D.....
76	Philadelphia, Pa.....	Jefferson Medical College.....	J. W. Holland, M. D.....
77	Philadelphia, Pa.....	Medico-Chirurgical College of Philadelphia.	Peter D. Keyser, A. M., M. D.....
78	Philadelphia, Pa.....	University of Pennsylvania, Medical Department.	William Pepper, M. D., LL. D.....
79	Philadelphia, Pa.....	Woman's Medical College of Pennsylvania.	Clara Marshall, M. D.....
80	Pittsburg, Pa.....	Western Pennsylvania Medical College.	James McCann, M. D.....
81	Charleston, S. C.....	Medical College of the State of South Carolina.	R. A. Kinloch, M. D.....
82	Memphis, Tenn.....	Memphis Hospital Medical College (South-Western Baptist University).	W. B. Rogers, M. D.....
83	Nashville, Tenn.....	Medical Department of the University of Nashville, and of Vanderbilt University.	L. C. Garland, A. M., LL. D., chancellor.
84	Nashville, Tenn.....	Medical Department, University of Tennessee.	Duncan Eve, A. M., M. D.....
85	Nashville, Tenn.....	Meharry Medical Department of Central Tennessee College.	G. W. Hubbard, M. D., dean.....
86	Burlington, Vt.....	Medical Department of the University of Vermont.	A. P. Grinnell, M. D., dean.....
87	Rutland, Vt.....	Vermont Medical College.....	Geo. Dutton, A. M., M. D., dean....
88	Richmond, Va.....	Medical College of Virginia.....	J. S. Dorsey Cullen, M. D.....
89	University of Virginia, Va.	University of Virginia, Medical Department.	Wm. M. Thornton, chairman of the faculty.
		3. Undergraduate—Eclectic.	
90	Atlanta, Ga.....	Georgia College of Eclectic Medicine and Surgery.	W. M. Durham, M. D., secretary.
91	Chicago, Ill.....	Bennett College of Eclectic Medicine and Surgery.	Milton Jay, M. D.....
92	Indianapolis, Ind.....	Indiana Eclectic Medical College.....	L. Abbott, M. D.....
93	Des Moines, Iowa.....	Iowa Medical College (Drake University).	G. T. Carpenter, A. M., F. A. S. C.
94	Des Moines, Iowa.....	King Eclectic Medical College*.....	O. H. P. Shoemaker, M. D.....
95	St. Louis, Mo.....	American Medical College.....	Edwin Younklin, M. D.....
96	New York, N. Y.....	Eclectic Medical College of the City of New York.	G. W. Boskowitz, M. D.....
97	Cincinnati, Ohio.....	American Eclectic Medical College.....	Benj. K. Maltby, A. M., Ph. D., M. D.
98	Cincinnati, Ohio.....	Eclectic Medical Institute.....	John M. Scudder, M. D.....

* Statistics of 1886-87.

and of Pharmacy, for 1887-88.—PART I—Continued.

Date of Charter.	Year of First Opening.	Professors and Instructors.			Students.			Number of Degrees Conferred in Course in 1887-88.	Are the Graduates of Your School Admitted to Practice in the State without Further Examination?	Is there any Examination for Admission?	Is a Knowledge of Medical Botany Required for a Diploma?	Is Chemical Laboratory Work Obligatory upon Students?	Is any Provision made for Instruction in Anatomical Drawing?	Number of Years in Course.	Number of Weeks in Scholastic Year.
		Resident.	Non-Resident.	Total.	Total Number.	Number Holding Degrees in Letters or Science.	Number of Graduates in 1887-88.								
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1810	1810	13	.....	13	526	.....	71	71	Yes.....	Yes.....	.....	Yes.....	.....	3	22 67
1852	1852	0	22	22	83	.....	21	21	Yes.....	Yes.....	No.....	Yes.....	No.....	3	22 68
1864	1864	15	0	15	52	9	21	21	Yes.....	Yes.....	No.....	Yes.....	No.....	3	22 69
.....	1842	17	.....	17	143	7	43	43	Yes.....	.....	.....	.....	.....	3	..... 70
1875	1875	13	2	15	55	10	15	15	Yes.....	Yes.....	No.....	Yes.....	No.....	3	26 71
1847	1847	14	0	14	89	.....	37	37	Yes.....	Yes.....	Yes.....	Yes.....	No.....	3	24 72
1883	1883	14	1	15	10	2	9	9	Yes.....	Yes.....	Yes.....	Yes.....	.....	2	26 73
1882	1883	13	1	14	28	3	6	6	Yes.....	Yes.....	.....	Yes.....	No.....	2	24 74
1853	1864	12	0	12	23	1	5	5	Yes.....	Yes.....	No.....	Yes.....	No.....	3	26 75
1826	1826	22	6	38	521	129	183	183	Yes.....	No.....	.....	Yes.....	.....	3	26 76
1850	1851	30	0	30	200	.....	20	20	Yes.....	Yes.....	Yes.....	Yes.....	No.....	3	35 77
.....	1765	66	0	66	445	119	118	118	Yes.....	Yes.....	.....	Yes.....	.....	3	..... 78
1848	1849	27	0	27	161	4	28	28	Yes.....	Yes.....	Yes.....	Yes.....	No.....	3	28 79
1833	1886	0	40	40	87	16	35	35	Yes.....	Yes.....	Yes.....	Yes.....	No.....	3	26 80
1832	1833	12	0	12	64	.....	17	17	Yes.....	Yes.....	No.....	Yes.....	No.....	3	20 81
1878	1880	10	0	10	145	.....	54	54	Yes.....	No.....	No.....	No.....	No.....	2	20 82
1873	1874	16	0	16	201	.....	81	81	.....	.....	.....	.....	.....	2	..... 83
1876	1877	15	0	15	223	.....	76	76	Yes.....	Yes.....	No.....	No.....	No.....	3	24 84
1866	1876	10	0	10	62	5	18	18	Yes.....	Yes.....	.....	.....	.....	3	20 85
1854	1854	.....	.....	24	189	.....	.....	.....	Yes.....	.....	.....	.....	.....	2	20 86
1887	1887	1	1	2	17	13	13	13	Yes.....	Yes.....	No.....	No.....	No.....	3	20 87
1838	1838	18	0	18	47	0	15	15	No.....	No.....	No.....	Yes.....	No.....	3	25 88
1819	1825	4	0	4	82	.....	22	22	No.....	No.....	.....	.....	.....	.....	89
1839	1840	7	0	7	59	12	22	22	Yes.....	Yes.....	Yes.....	Yes.....	.....	2	20 90
1869	1868	21	0	21	127	83	41	41	Yes.....	Yes.....	Yes.....	Yes.....	.....	3	26 91
1880	1880	7	5	12	24	3	10	10	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	3	21 92
.....	1881	16	0	16	118	.....	43	43	Yes.....	Yes.....	.....	Yes.....	.....	2	..... 93
.....	1833	8	10	18	36	2	2	2	Yes.....	Yes.....	Yes.....	Yes.....	Yes.....	3	..... 94
1873	1873	15	0	15	49	.....	13	13	Yes.....	Yes.....	.....	.....	.....	3	20 95
1865	1865	17	3	20	63	9	11	11	Yes.....	Yes.....	No.....	Yes.....	Yes.....	3	26 96
1879	1879	9	4	13	40	0	15	15	Yes.....	Yes.....	Yes.....	Yes.....	No.....	2	40 97
1845	1843	10	0	10	227	.....	61	61	Yes.....	Yes.....	Yes.....	No.....	.....	3	40 98

TABLE 69.—*Statistics of Schools of Medicine, of Dentistry,*

Location.		Name.	President or Dean.
1		2	3
I.—MEDICAL AND SURGICAL—Cont'd.			
4. <i>Homœopathic.</i>			
99	San Francisco, Cal.....	Hahnemann Hospital College of San Francisco.	J. A. Albertson, M. D.....
100	Chicago, Ill.....	Chicago Homœopathic Medical College.	J. S. Mitchell, A. M., M. D.....
101	Chicago, Ill.....	Hahnemann Medical College and Hospital.	E. S. Bailey, M. D., registrar.....
102	Iowa City, Iowa.....	Homœopathic Medical Department, State University of Iowa.	Charles A. Schaeffer, A. M., PH. D.
103	Boston, Mass.....	Boston University School of Medicine.	I. Tisdale Talbot, M. D., dean.....
104	Ann Arbor, Mich.....	Homœopathic Medical College of the University of Michigan.	James B. Angell, LL. D.....
105	St. Louis, Mo.....	Homœopathic Medical College of Missouri.	S. B. Parsons, M. D.....
106	New York, N. Y.....	New York Homœopathic Medical College.	L. L. Danforth, M. D., secretary..
107	New York, N. Y.....	New York Medical College and Hospital for Women.	Louise Gerrard, M. D., secretary
108	Cincinnati, Ohio.....	Pulte Medical College.....	J. D. Buck, M. D.....
109	Cleveland, Ohio.....	Homœopathic Hospital College.....	J. C. Sanders, A. M., M. D.....
110	Philadelphia, Pa.....	Hahnemann Medical College and Hospital.	A. R. Thomas, M. D.....
5. <i>Undergraduate Physio-Medical.</i>			
111	Chicago, Ill.....	Physio-Medical Institute.....	J. E. Roop, M. D.....
112	Indianapolis, Ind.....	Physio-Medical College of Indiana*..	E. Anthony, M. D.....
6. <i>Graduate.</i>			
113	Chicago, Ill.....	Chicago Ophthalmic College*.....	J. E. Harper, A. M., M. D.....
114	St. Louis, Mo.....	St. Louis Post-Graduate School of Medicine.	W. A. Hardaway, M. D.....
115	New York, N. Y.....	New York Polyclinic.....	J. A. Wyeth, M. D., secretary.....
116	New York, N. Y.....	New York Post-Graduate Medical School and Hospital.	D. B. St. John Roosa, M. D.....
117	Philadelphia, Pa.....	Auxiliary Department of Medicine, University of Pennsylvania.	William Pepper, M. D., LL. D.....
118	Philadelphia, Pa.....	Philadelphia Polyclinic and College for Graduates in Medicine.	John B. Roberts, M. D.....
II.—DENTAL.			
119	San Francisco, Cal....	Dental Department, University of California.	C. L. Goddard, A. M., D. D. S., dean.
120	Washington, D. C.....	Dental Department, National University. ^b	H. H. Barker, M. D.....
121	Washington, D. C.....	Howard University, Dental Department.	Rev. Wm. W. Patton, D. D., LL. D.
122	Chicago, Ill.....	American College of Dental Surgery..	I. Clendenen, M. D.....
123	Chicago, Ill.....	Chicago College of Dental Surgery.....	Truman W. Brophy, M. D., D. D. S.
124	Chicago, Ill.....	North-Western College of Dental Surgery.	F. H. B. McDowell.....
125	Indianapolis, Ind.....	Indiana Dental College.....	W. L. Heiskell, D. D. S.....
126	Iowa City, Iowa.....	Dental Department, State University of Iowa.	Charles A. Schaeffer, PH. D.....

* Statistics of 1886-87.

a Three months.

and of Pharmacy, for 1887-88.—PART I—Continued.

Date of Charter.	Year of First Opening.	Professors and Instructors.			Students.			Number of Degrees Conferred in Course in 1887-88.	Are the Graduates of Your School Admitted to Practice in the State without Further Examination?	Is there any Examination for Admission?	Is a Knowledge of Medical Botany Required for a Diploma?	Is Chemical Laboratory Work Obligatory upon Students.	Is any Provision made for Instruction in Anatomical Drawing.	Number of Years in Course.	Number of Weeks in Scholastic Year.	
		Resident.	Non-Resident.	Total.	Total Number.	Number Holding Degrees in Letters or Science.	Number of Graduates in 1887-88.									
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1887	1884	19	1	20	21	0	9	9	Yes....	Yes....	No....	No....	No....	3	24	99
1876	1876	21	0	21	128	22	47	47	Yes...	Yes....	Yes....	Yes....	.....	3	22	100
1855	1859	19	2	21	187	.....	78	79	Yes....	Yes....	No....	Yes....	No....	3	21	101
1877	1877	.....	.....	9	32	0	.....	.....	Yes....	Yes....	.....	.....	.....	2-3	20	102
1869	1873	.....	.....	38	110	25	39	39	Yes....	Yes....	.....	.....	.....	3-4	32	103
1874	1875	.....	.....	5	76	6	.....	.....	Yes....	Yes....	.....	.....	.....	3	.....	104
1857	1857	13	0	13	44	.....	18	18	Yes....	Yes....	No....	No....	No....	3	26	105
1861	1861	29	0	29	138	13	48	48	Yes....	Yes....	No....	Yes....	No....	3	.....	106
1863	1863	20	0	20	41	.....	9	9	Yes....	Yes....	No....	Yes....	.....	3	26	107
1871	1871	10	2	12	65	10	30	30	Yes....	Yes....	Yes....	No....	No....	3	21	108
1849	1849	13	0	13	92	12	34	34	Yes....	Yes....	Yes....	Yes....	Yes....	3	26	109
1848	1848	22	1	23	184	11	48	48	Yes....	Yes....	No....	Yes....	No....	3	26	110
1885	1885	5	6	11	15	.....	5	5	Yes....	Yes....	Yes....	Yes....	Yes....	2	24	111
.....	1873	6	6	12	26	20	8	8	Yes....	Yes....	Yes....	Yes....	Yes....	2	.....	112
1884	1886	10	0	10	35	.....	14	0	.....	Yes....	No....	No....	No....	(a)	.....	113
.....	1885	10	16	26	24	24	24	.....	.....	No....	.....	.....	.....	34	.....	114
1886	1882	76	.....	76	325	.....	325	.....	.....	.....	.....	.....	.....	.....	.....	115
.....	1882	69	.....	69	337	.....	.....	.....	No....	.....	.....	.....	.....	52	.....	116
1865	1865	5	0	5	13	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	117
1883	1883	22	0	22	56	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	118
1882	1882	.....	.....	25	36	0	12	12	Yes....	Yes....	Yes....	No....	No....	3	34	119
1884	1884	2	0	2	18	.....	8	8	Yes....	Yes....	.....	.....	.....	.....	.....	120
1886	1886	15	4	19	54	2	9	10	Yes....	Yes....	Yes....	Yes....	Yes....	3	38	122
1883	1883	45	12	57	126	8	44	44	Yes....	Yes....	No....	Yes....	No....	3	26	123
1885	1885	8	1	9	27	5	11	11	Yes....	Yes....	Yes....	Yes....	.....	2	36	124
1879	1879	6	0	6	30	.....	17	17	Yes....	Yes....	No....	Yes....	No....	3	20	125
1883	1882	.....	.....	7	53	0	20	20	Yes....	Yes....	.....	.....	.....	2	20	126

b Included in statistics of medical department.

TABLE 69.—*Statistics of Schools of Medicine, of Dentistry,*

Location.	Name.	President or Dean.
1	2	3
	II. DENTAL—Continued.	
127 Louisville, Ky.....	Louisville College of Dentistry, Dental Department of Central University.	Jas. Lewis Howe.....
128 Baltimore, Md.....	Baltimore College of Dental Surgery..	R. B. Winder, M. D., D. D. S.
129 Baltimore, Md.....	University of Maryland, Dental Department.	Ferdinand I. S. Gorgas, A. M., M. D., D. D. S.
130 Boston, Mass.....	Boston Dental College*.....	John A. Follett, A. M., M. D.
131 Boston, Mass.....	Harvard University, Dental Department.	C. W. Eliot, LL. D., president; Thomas H. Chandler, D. M. D., dean.
132 Ann Arbor, Mich.....	Dental College of the University of Michigan.	James B. Angell, LL. D., president; Jonathan Taft, M. D., D. D. S., dean.
133 Minneapolis, Minn.....	Minnesota Hospital College, Dental Department.*	W. A. S. Spaulding, D. D. S., dean.
134 St. Paul, Minn.....	St. Paul Medical College, Dental Department.*	Louis W. Lyon, D. D. S., dean.....
135 Kansas City, Mo.....	Kansas City Dental College.....	J. D. Patterson, D. D. S., secretary.
136 St. Louis, Mo.....	Missouri Dental College.....	Henry H. Mudd, M. D.
137 New York, N. Y.....	New York College of Dentistry.....	Frank Abbott, M. D.
138 Cincinnati, O.....	Ohio College of Dental Surgery.....	H. A. Smith, D. D. S.
139 Philadelphia, Pa.....	Pennsylvania College of Dental Surgery.	C. N. Peirce, D. D. S.
140 Philadelphia, Pa.....	University of Pennsylvania, Dental Department.	William Pepper, M. D., LL. D.
141 Nashville, Tenn.....	Dental Department, University of Tennessee.*	James Y. Crawford, D. D. S.
142 Nashville, Tenn.....	School of Dentistry, Meharry Medical Department, Central Tennessee College.*	G. W. Hubbard, M. D., dean.....
143 Nashville, Tenn.....	Vanderbilt University, Department of Dentistry.	L. C. Garland, A. M., LL. D., chancellor.
	III.—PHARMACEUTICAL.	
144 San Francisco, Cal.....	California College of Pharmacy (University of California).	E. W. Runyon, PH. G.
145 Washington, D. C.....	National College of Pharmacy.....	R. L. Eliot, secretary.....
146 Washington, D. C.....	Pharmaceutical College of Howard University.	Rev. Wm. W. Patton, D. D., LL. D.
147 Chicago, Ill.....	Chicago College of Pharmacy.....	D. H. Galloway, secretary.....
148 Chicago, Ill.....	Illinois College of Pharmacy (North-Western University).	Oscar Oldberg, PHARM. D.
149 La Fayette, Ind.....	School of Pharmacy, Purdue University.*	Arthur L. Green.....
150 Des Moines, Iowa.....	Iowa College of Pharmacy.....	Lewis Schooler, M. D.
151 Iowa City, Iowa.....	Pharmaceutical Department of State University of Iowa.	Charles A. Schaeffer, PH. D.
152 Lawrence, Kans.....	Department of Pharmacy, University of Kansas.	J. A. Lippincott, D. D., LL. D.
153 Louisville, Ky.....	Louisville College of Pharmacy.....	J. W. Fowler.....
154 Louisville, Ky.....	Louisville School of Pharmacy for Women.	J. P. Barnum, A. M., M. D.
155 New Orleans, La.....	Class in Pharmacy of the Medical Department of Tulane University.	Stanford E. Chaillé, M. D., dean..

* Statistics of 1886-87.

and of Pharmacy, for 1887-88.—PART I—Continued.

Date of Charter.	Year of First Opening.	Professors and Instructors.			Students.			Number of Degrees Conferred in Course in 1887-88.	Are the Graduates of Your School Admitted to Practice in the State without Further Examination?	Is there any Examination for Admission?	Is a Knowledge of Medical Potany Required for a Diploma?	Is Chemical Laboratory Work Obligatory upon Students?	Is any Provision made for Instruction in Anatomical Drawing?	Number of Years in Course.	Number of Weeks in Scholastic Year.	
		Resident.	Non-Resident.	Total.	Total Number.	Number Holding Degrees in Letters or Science.	Number of Graduates in 1887-88.									
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1872	1887	13	8	21	25	.....	4	4	Yes....	Yes....	.....	Yes....	.....	2	20	127
1839	1840	20	20	40	114	25	53	53	Yes....	Yes....	No....	Yes....	No....	2	22	128
1807	1882	19	10	29	109	13	51	51	Yes....	Yes....	No....	Yes....	No....	2	24	129
.....	1868	15	0	15	65	2	8	8	No....	Yes....	No....	No....	.....	3	.....	130
.....	1898	.....	.....	24	32	2	6	6	No....	Yes....	.....	.....	.....	3	40	131
1874	1874	5	0	5	104	3	37	37	.....	Yes....	.....	.....	.....	2-3	38	132
.....	1883	15	.....	15	30	2	4	4	Yes....	Yes....	No....	Yes....	No....	2	.....	133
.....	1885	13	.....	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	134
1880	1881	14	1	15	23	.....	8	8	Yes....	Yes....	No....	Yes....	.....	2	26	135
.....	1865	13	1	14	86	.....	13	13	Yes....	Yes....	No....	Yes....	No....	2	25	136
1885	1866	32	4	36	211	6	72	72	Yes....	Yes....	No....	No....	No....	2	52	137
1844	1845	10	3	13	126	.....	46	46	Yes....	Yes....	No....	Yes....	.....	3	21	138
1855	1855	17	0	17	155	2	53	58	Yes....	Yes....	No....	Yes....	No....	2	22	139
.....	1878	32	0	32	127	3	56	56	Yes....	.....	.....	.....	.....	2	.....	140
.....	.....	10	8	18	.....	.....	22	22	Yes....	.....	.....	.....	.....	2	.....	141
.....	1886	7	.....	7	9	1	3	3	Yes....	Yes....	No....	Yes....	No....	2	.....	142
1874	1879	10	0	10	77	.....	33	33	.....	.....	.....	.....	.....	2	22	143
1872	1873	4	0	4	83	1	14	14	Yes....	Yes....	Yes....	No....	No....	2	26	144
1872	1872	4	0	4	60	.....	21	21	Yes....	Yes....	Yes....	Yes....	.....	2	25	145
.....	.....	1	0	1	23	.....	14	14	Yes....	Yes....	.....	.....	.....	.....	.....	146
1859	1859	7	0	7	290	.....	60	60	No....	Yes....	Yes....	Yes....	.....	2	20	147
1886	1886	6	0	6	183	2	34	35	No....	Yes....	Yes....	Yes....	.....	2	21	148
.....	1884	5	1	6	27	.....	4	4	Yes....	Yes....	No....	Yes....	.....	2	.....	149
1881	1882	3	1	4	7	2	2	2	Yes....	No....	Yes....	Yes....	.....	2	20	150
.....	1885	.....	.....	5	20	0	1	1	Yes....	Yes....	.....	.....	.....	2	26	151
.....	1885	7	0	7	40	0	10	10	.....	Yes....	.....	.....	.....	2	.....	152
1870	1870	4	0	4	59	9	13	13	Yes....	Yes....	Yes....	Yes....	.....	2	22	153
1884	1883	4	0	4	15	12	2	3	Yes....	Yes....	Yes....	Yes....	No....	3	40	154
.....	1899	3	0	3	31	.....	10	10	Yes....	No....	.....	.....	.....	2	.....	155

TABLE 69.—*Statistics of Schools of Medicine, of Dentistry,*

Location.	Name.	President or Dean.
1	2	3
	III.—PHARMACEUTICAL—Continued.	
156 Baltimore, Md.....	Maryland College of Pharmacy.....	Edwin Eareckson, PH. G., M. D.
157 Boston, Mass.....	Massachusetts College of Pharmacy...	Henry Canning.....
158 Ann Arbor, Mich.....	School of Pharmacy of University of Michigan.	James B. Angell, LL. D., president; Albert B. Prescott, PH. D., M. D., dean.
159 Minneapolis, Minn.....	Minnesota College of Pharmacy.....	J. T. Moore, M. D.....
160 Kansas City, Mo.....	Kansas City College of Pharmacy.....	J. Schweitzer, M. F. S., F. C. S.....
161 St. Louis, Mo.....	St. Louis College of Pharmacy.....	James M. Good, PH. G.....
162 Albany, N. Y.....	Albany College of Pharmacy (Union University).	Willis G. Tucker, M. D., PH. D.....
163 Buffalo, N. Y.....	Department of Pharmacy, University of Buffalo.	E. V. Stoddard, A. M., M. D.....
164 New York, N. Y.....	College of Pharmacy of the City of New York.	Ewen McIntyre.....
165 Cincinnati, Ohio.....	Cincinnati College of Pharmacy.....	C. T. P. Fennel, PH. G., secretary.
166 Philadelphia, Pa.....	Philadelphia College of Pharmacy.....	Thos. Wiegand, actuary.....
167 Pittsburg, Pa.....	Pittsburg College of Pharmacy.....	George A. Kelly.....
168 Nashville, Tenn.....	Department of Pharmacy, Vanderbilt University.	L. C. Garland, A. M., LL. D., chancellor.
169 Madison, Wis.....	Department of Pharmacy, University of Wisconsin.*	T. C. Chamberlin, A. M., PH. D.....
	IV.—VETERINARY.	
170 Chicago, Ill.....	Chicago Veterinary College.....	R. J. Withers, M. D., V. S.....
171 Boston, Mass.....	Veterinary Department, Harvard University.	C. W. Eliot, LL. D., president; Charles P. Lyman, F. R. C. V. S., dean.
172 Minneapolis, Minn.....	North-Western Veterinary College.....	C. C. Lyford, M. D., C. M., B. S., V. S.
173 New York, N. Y.....	American Veterinary College.....	A. Liautard, M. D., V. M.....
174 New York, N. Y.....	New York College of Veterinary Surgeons.	William T. White, M. D.....
175 Philadelphia, Pa.....	Veterinary Department, University of Pennsylvania.	William Pepper, M. D., LL. D.....

* Statistics of 1886-87.

and of Pharmacy, for 1887-88.—PART I—Continued.

Date of Charter.	Year of First Opening.	Professors and Instructors.			Students.			Number of Degrees Conferred in Course in 1887-88.	Are the Graduates of Your School Admitted to Practice in the State without Further Examination?	Is there any Examination for Admission.	Is a Knowledge of Medical Botany Required for a Diploma?	Is Chemical Laboratory Work Obligatory upon Students?	Is any Provision made for Instruction in Anatomical Drawing?	Number of Years in Course.	Number of Weeks in Scholastic Year.	
		Resident.	Non-Resident.	Total.	Total Number.	Number Holding Degrees in Letters or Science.	Number of Graduates in 1887-88.									
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1841	1842	3	1	4	143	0	40	40	Yes....	Yes....	Yes....	Yes....	.....	2	36	156
1852	1867	4	0	4	252	6	39	39	Yes....	Yes....	Yes....	Yes....	.....	2	32	157
1868	1868	.....	.....	9	90	4	23	23	.....	Yes....	.....	.....	.....	2	38	158
1885	1885	4	0	4	14	0	5	5	No.....	Yes....	Yes....	Yes....	.....	2	20	159
.....	1886	4	0	4	7	.....	.....	.....	.....	.....	Yes....	Yes....	.....	2	20	160
1866	1866	6	0	6	170	.....	51	51	Yes....	Yes....	Yes....	Yes....	No.....	2	20	161
1881	1881	3	0	3	44	0	11	11	No.....	Yes....	No.....	Yes....	No.....	2	20	162
1886	1886	4	3	7	53	0	18	12	No.....	No.....	Yes....	Yes....	No.....	2	22	163
1831	1829	6	0	6	309	.....	87	87	No.....	Yes....	Yes....	Yes....	No.....	2	25	164
1850	1871	5	1	6	125	.....	23	23	No.....	Yes....	Yes....	Yes....	No.....	2	20	165
1822	1821	7	0	7	544	1	174	177	.....	No.....	Yes....	No.....	No.....	2	20	166
.....	1878	3	0	3	41	.....	17	17	.....	.....	.....	.....	.....	2	22	167
.....	1879	10	0	10	44	.....	5	5	.....	.....	.....	.....	.....	2	24	168
.....	1883	4	0	4	47	.....	14	14	Yes....	Yes....	Yes....	Yes....	.....	2	.....	169
1883	1883	0	11	11	55	.....	21	21	Yes....	Yes....	.....	Yes....	.....	2	20	170
.....	1883	.....	.....	18	26	0	1	1	Yes....	Yes....	.....	.....	.....	3	40	171
1885	1880	4	2	6	4	.....	0	0	Yes....	Yes....	Yes....	Yes....	.....	3	26	172
1875	1875	15	0	15	136	0	32	32	Yes....	Yes....	No.....	Yes....	No.....	2	26	173
1887	1865	17	0	17	44	0	13	13	Yes....	No.....	.....	Yes....	No.....	3	24	174
.....	1883	17	0	17	58	0	14	14	.....	Yes....	Yes....	Yes....	.....	3	.....	175

TABLE 69.—Statistics of Schools of Medicine, of Dentistry, and of Pharmacy, for 1887-88.—PART II.

Name.	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
	Number of Endowed Pro- fessorships.	Number of Scholarships.	Number of Volumes in Li- brary.	Amount of Matriculation Fee.	Amount of Graduation Fee.	Annual Charge for Tuition to Each Pupil.	Average Cost of Board and Lodging per Annum.	Value of Scientific Appa- ratus.	Value of Grounds and Build- ings.	Amount of Permanent Pro- ductive Funds.	Income for Year from Pro- ductive Funds.	Amount of State or Munici- pal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.
I.—MEDICAL AND SURGICAL.															
1. Preparatory.															
1 Portland School for Medical Instruction.....	0	0	200	.....	.....	\$67	\$100	\$300	0	0	0	0	\$754	\$754	0
2. Undergraduate—Regular.															
2 Medical College of Alabama.....	0	47	300	\$5	\$25	85	75	50,000	\$75,000	.....	.....	.....	3,800	5,075	.....
3 Medical Department of the Arkansas Industrial University.....	0	0	.....	5	25	50	100	.....	16,000	0	0	0	.....	.....	\$15
4 College of Medicine of the University of South- ern California.*.....	.....	.....	.....	5	40	130	.....	.....	.....	.....	.....	.....	.....	.....	.....
5 Cooper Medical College.....	0	0	781	5	40	130	.....	5,000	100,000	0	0	0	11,450	11,450	0
6 Medical Department of the University of Cali- fornia.....	0	0	.....	5	40	130	155	.....	.....	.....	.....	.....	.....	.....	.....
7 Medical Department of the University of Col- orado.....	0	0	.....	5	10	0	144	.....	.....	.....	.....	.....	.....	.....	.....
8 University of Denver, Medical Department*.....	.....	.....	.....	5	30	75	.....	.....	.....	\$39,145	\$29,753	.....	.....	.....	.....
9 Medical Department of Yale University.....	.....	.....	.....	5	30	125	.....	.....	.....	.....	.....	.....	\$2,995	\$5,753	.....
10 Howard University, Medical Department.....	0	.....	.....	5	30	50	.....	.....	.....	0	0	0	.....	.....	.....
11 Medical Department of National University.....	0	2	.....	5	30	.....	.....	600	0	0	0	0	.....	.....	150
12 National Medical College (Columbian Univer- sity).....	0	6	.....	5	0	.....	145	.....	.....	.....	.....	.....	.....	.....	.....
13 University of Georgetown, Medical Department.....	.....	.....	.....	5	0	100	125	.....	.....	.....	.....	.....	.....	.....	.....
14 Atlanta Medical College.....	.....	10	3,000	5	30	80	100	5,000	15,000	.....	.....	.....	8,200	8,200	.....
15 Southern Medical College.....	0	0	5,000	5	30	75	65-100	5,000	20,000	.....	.....	.....	5,500	5,500	.....
16 Medical College of Georgia (University of Geor- gia).....	.....	.....	5,000	5	30	75	80	2,000	30,000	0	0	.....	.....	4,700	0
17 Chicago Medical College (North-Western Uni- versity).....	0	0	500	5	30	75	150	1,000	45,000	.....	.....	.....	10,000	11,000	.....

18	College of Physicians and Surgeons of Chicago.....	0	0	0	5	30	80	130	7,350	75,000	0	10,767	12,000	0
19	Rush Medical College.....	0	0	5	5	30	80	120-150	300	425,000	150	4,212	7,244	0
20	Woman's Medical College of Chicago.....	3	0	5	5	25	60	77	300	47,000	0	0	0	0
21	Fort Wayne College of Medicine (Gladstock College).....	0	0	5	5	25	60	77	300	47,000	0	0	0	0
22	Central College of Physicians and Surgeons.....	0	0	1,035	5	25	96	73-90	5,000	10,000	0	4,500	4,500	0
23	Central College of Indiana.....	0	0	1,200	5	25	66	73-90	5,000	10,000	0	1,400	1,550	0
24	Central College of Physicians and Surgeons.....	0	0	100	5	25	65	75	500	0	0	0	0	0
25	Iowa College of Physicians and Surgeons (Drake University).....	0	0	1,600	5	10	20	0	0	0	0	0	0	0
26	Medical Department, State University of Iowa.....	0	0	1,600	5	30	20	0	0	50,000	0	6,000	6,000	0
27	College of Physicians and Surgeons *.....	0	0	0	5	30	75	80	1,034	14,000	0	0	0	0
28	Hospital College of Medicine (Central University).....	0	1	0	5	30	75	80	1,034	14,000	0	0	0	0
29	Kentucky School of Medicine.....	0	0	0	5	30	75	90	0	0	0	0	0	0
30	Louisville Medical College.....	0	0	0	5	30	70	90	0	0	0	0	0	0
31	University of Louisville, Medical Department.....	0	0	5,000	5	30	90	90	0	150,000	0	0	0	0
32	Medical Department, Tulane University.....	0	0	0	5	30	140	0	0	0	0	0	0	0
33	Medical School of Maine at Bowdoin College.....	0	0	4,040	5	25	78	0	0	25,000	0	6,973	6,973	0
34	Baltimore Medical College.....	0	0	0	5	30	50-100	95	1,000	100,000	0	0	0	0
35	Baltimore University School of Medicine.....	0	0	0	5	30	120	0	15,440	0	0	0	0	0
36	College of Physicians and Surgeons.....	0	0	0	5	30	120	115	1,000	100,000	0	14,300	22,000	53,300
37	University of Maryland, School of Medicine.....	0	0	0	5	30	40	0	500	75,000	0	0	16,500	20,575
38	Woman's Medical College of Baltimore.....	0	0	35	5	30	45	0	500	75,000	0	0	880	2,352
39	College of Physicians and Surgeons.....	0	0	0	5	30	40	0	500	75,000	0	0	4,232	4,252
40	Harvard University Medical School.....	4	6	1,500	5	30	200	0	0	0	0	0	31,958	66,428
41	Department of Medicine and Surgery of the University of Michigan.....	0	0	3,647	10	625	0	0	0	0	0	0	0	0
42	Detroit College of Medicine.....	0	0	300	5	30	60	0	0	50,000	5,000	0	8,220	9,359
43	Minneapolis College of Physicians and Surgeons.....	0	0	0	5	10	40	100-150	20	0	0	0	0	0
44	Minnesota Hospital College.....	0	0	0	5	25	50	260	5,000	40,000	0	0	4,150	4,150
45	St. Paul Medical College *.....	0	0	200	5	25	55	0	0	0	0	0	2,200	2,200
46	Medical Department, University of the State of Missouri.....	0	1	0	0	0	40	150	0	0	0	0	0	0
47	Kansas City Medical College.....	0	0	0	5	20	60	0	2,000	26,000	0	0	2,850	2,850
48	University Medical College.....	0	0	0	5	20	65	120-180	3,000	20,000	0	0	0	0
49	North-Western Medical College of St. Joseph.....	0	0	0	5	25	45	0	800	0	0	0	0	0
50	St. Joseph Medical College.....	0	0	0	5	25	45	0	0	0	0	0	0	0
51	Reumont Hospital Medical College *.....	0	0	0	0	0	70	0	0	0	0	0	0	0
52	Missouri Medical College.....	0	0	0	5	30	75	110	3,000	50,000	0	0	3,750	3,750</

b For residents; \$35 for non-residents.

a For residents; \$25 for non-residents.

*Statistics of 1836-87.

TABLE 69.—Statistics of Schools of Medicine, of Dentistry, and of Pharmacy, for 1887-88.—PART II—Continued.

Name.	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
	Number of Endowed Professors.	Number of Scholarships.	Number of Volumes in Library.	Amount of Matriculation Fee.	Amount of Graduation Fee.	Annual Charge for Tuition to Each Pupil.	Average Cost of Board and Lodging per Annum.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for Year from Productive Funds.	Amount of State or Municipal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from All Sources except Charges for Board and Lodging.	Benefactions.
I.—MEDICAL AND SURGICAL—Continued.															
2. Undergraduate—Regular—Continued.															
62 University of the City of New York, Medical Department.*	0	0	0	\$5	\$30	\$140		\$3,500	\$300,000	0	0	0			
63 Woman's Medical College of the New York Infirmary.	0	0	0	5	30	100			35,000			0			
64 College of Medicine of Syracuse University.....	0	0	0	5	25	80						0			
65 Leonard Medical College (Shaw University).....	0	0	0	5	10	60			1,500	0	0	0	\$2,600	\$2,600	
66 Cincinnati College of Medicine and Surgery.....	0	0	0	5	25	40	\$80	600	45,000			0			
67 Medical College of Ohio.....	0	0	0	5	25	75						0			
68 Miami Medical College.....	0	0	0	5	25	75	65-130					0	3,000	3,000	
69 Medical Department of the University of Worcester.	0	0	200	5	30	60	175	500	12,000			0			
70 Western Reserve University, Medical Department.*	0	0	900	5	30	75			250,000						
71 Columbus Medical College.....	0	0	100	5	25	40	100	1,000	20,000			0	2,500	2,500	0
72 Stirling Medical College.....	0	0	1,800	5	25	70	98	1,000	200,000	0	0	0			0
73 North-Western Ohio Medical College.....	0	0	0	5	25	40	75	1,000				0	700	700	0
74 Toledo Medical College.....	0	0	100	5	25	40	95	500	\$1,000	\$8,000	\$350	0	1,700	2,980	0
75 Medical Department, Williams University.....	0	0	1,500	5	30	130	120	4,000	35,000	0	0	0	2,800	2,450	0
76 Jefferson Medical College.....	0	0	0	5	30	140									
77 Medico-Chirurgical College of Philadelphia.....	1	2	150	5	30	100			25,000				7,400	7,400	
78 University of Pennsylvania Medical Department.....	1	5	1,200	5	0	150				45,000	4,000	0	8,000	12,000	\$1,500
79 Woman's Medical College of Pennsylvania.....	0	0	0	5	30	110	140	3,000	60,000			0	9,422	11,927	0
80 Western Pennsylvania Medical College.....	0	0	0	5	25	100	180	5,000	20,000	0	0	0	3,000	3,500	0
81 Medical College of the State of South Carolina.....	0	6	0	5	30	115	100	1,000				0			

		0	26	500	5	30	65	106	3,000	15,000	0	0	0	9,700	9,700	0
82	Memphis Hospital Medical College (South-Western Baptist University).....	0	0	.....	5	25	75	.....	.....	.....	.....	.....	.....	.....	.....	.....
83	Medical Department of the University of Nashville and of Vanderbilt University.....	0	0	.....	5	25	75	.....	.....	.....	.....	.....	.....	.....	.....	.....
84	Medical Department, University of Tennessee.....	0	0	500	5	25	90	.....	.....	32,000	.....	.....	.....	10,000	12,000	.....
85	McClary Medical Department of Central Tennessee College.....	0	1	151	.....	10	25	45	.....	1,000	.....	.....	.....	877	4,251	.....
86	Medical Department of the University of Tennessee College.....	0	0	.....	5	25	75	.....	.....	.....	.....	.....	.....	.....	.....	.....
87	Vermont Medical College.....	0	0	0	5	30	60	200	.....	.....	0	0	0	.....	.....	.....
88	Medical College of Virginia.....	0	0	.....	5	30	88	75	2,000	100,000	.....	.....	\$1,500	4,010	5,510	0
89	University of Virginia, Medical Department.....	0	2	.....	25	.....	110	123	.....	.....	.....	.....	.....	.....	.....	.....
3. Undergraduate—Eclectic.																
90	Georgia College of Eclectic Medicine and Surgery.....	.....	6	500	5	25	80	100	3,000	15,000	.....	.....	.....	3,000	3,000	.....
91	Bennett College of Eclectic Medicine and Surgery.....	.....	.....	300	5	25	75	130	500	75,000	.....	.....	.....	10,000	10,000	.....
92	Indiana Eclectic Medical College.....	0	10	.....	5	25	50	85	.....	.....	.....	.....	.....	600	600	.....
93	Iowa Medical College (Drake University).....	0	0	.....	5	25	25	.....	.....	25,000	.....	.....	.....	.....	.....	.....
94	King Eclectic Medical College *.....	0	.....	.....	5	25	35	.....	.....	.....	.....	.....	.....	.....	.....	.....
95	American Medical College.....	0	.....	.....	5	25	100	160	.....	*1,000	.....	.....	.....	.....	.....	.....
96	Eclectic Medical College of the City of New York.....	0	.....	700	5	30	100	130	5,000	46,000	.....	.....	.....	4,000	6,500	2,000
97	American Eclectic Medical College.....	0	0	0	5	25	75	120	100	0	0	0	0	2,000	2,000	0
98	Eclectic Medical Institute.....	0	0	.....	.....	25	150	120-200	2,000	80,000	.....	.....	.....	15,500	15,500	0
4. Homoeopathic.																
99	Hahnemann Hospital College of San Francisco.....	0	0	1,300	5	40	125	400	3,000	0	0	0	0	3,000	3,000	0
100	Chicago Homoeopathic Medical College.....	0	.....	600	5	25	55	110	2,000	50,000	.....	.....	.....	6,500	6,500	.....
101	Hahnemann Medical College and Hospital.....	0	0	.....	5	25	55	250	1,000	75,000	.....	.....	.....	10,000	14,000	.....
102	Homoeopathic Medical Department, State University of Iowa.....	0	0	.....	5	25	38	.....	.....	.....	.....	.....	.....	1,395	1,395	.....
103	Boston University, School of Medicine.....	0	10	.....	5	30	125	.....	.....	.....	.....	.....	.....	.....	.....	.....
104	Homoeopathic Medical College of the University of Michigan.....	0	0	.....	20	10	625	.....	.....	.....	.....	.....	.....	.....	.....	.....
105	Homoeopathic Medical College of Missouri.....	0	7	.....	5	25	50	.....	.....	18,000	.....	.....	.....	2,800	2,800	.....
106	New York Homoeopathic Medical College.....	0	0	2,000	5	30	100	.....	1,000	112,000	0	0	0	9,961	11,949	.....
107	New York Medical College and Hospital for Women.....	0	0	.....	5	30	75	.....	.....	.....	.....	.....	.....	2,765	2,765	.....
108	Pulte Medical College.....	0	0	500	5	30	55	150	300	50,000	0	0	0	4,000	4,000	100
109	Homoeopathic Hospital College.....	0	0	3,000	5	30	75	130	3,000	.....	.....	.....	.....	6,000	6,000	0
110	Hahnemann Medical College and Hospital.....	0	7	6,400	5	30	100	120	10,000	240,000	125,000	6,300	25,000	17,188	49,427	15,000
5. Undergraduate—Physio-Medical.																
111	Physio-Medical Institute.....	0	0	.....	5	25	65	95	250	0	0	0	0	1,100	1,300	200
112	Physio-Medical College of Indiana *.....	.....	.....	150	5	25	75	.....	4,000	.....	.....	.....	.....	.....	.....	2,462

a For residents; \$25 for non-residents.

b For residents; \$25 for non-residents.

* Statistics of 1886-87.

TABLE 69.—*Statistics of Schools of Medicine, of Dentistry, and of Pharmacy, for 1887-88.*—PART II—Continued.

Name.	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
	Number of Endowed Professors.	Number of Scholarships.	Number of Volumes in Library.	Amount of Matriculation Fee.	Amount of Graduation Fee.	Annual Charge for Tuition to Each Pupil.	Average Cost of Board and Lodging per Annum.	Value of Scientific Apparatus.	Value of Grounds and Buildings.	Amount of Permanent Productive Funds.	Income for Year from Productive Funds.	Amount of State or Municipal Aid Received within the Year.	Amount of Receipts within the Year from Tuition Fees.	Income for Year from all Sources except Charges for Board and Lodging.	Benefactions.
I.—MEDICAL AND SURGICAL—Continued.															
6. Graduate.															
113 Chicago Ophthalmic College.....	.....	.....	0	\$5	0	\$25	.....	\$1,000	.....	.....	.....	.....	.....	\$630	0
114 St. Louis Post-Graduate School of Medicine.....	.....	.....	.....	.....	.....	50	.....	200	\$33,000	.....	.....	.....	.....	1,100	.....
115 New York Polytechnic.....	.....	.....	2,000	.....	.....	.....	.....	2,500	75,000	0	0	0	19,600	19,000	0
116 New York Post-Graduate Medical School and Hospital.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
117 Auxiliary Department of Medicine, University of Pennsylvania.....	0	0	.....	5	.....	35	.....	.....	.....	.....	.....	.....	.....	.....	.....
118 Philadelphia Polytechnic and College for Graduates in Medicine.....	0	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
II. DENTAL.															
119 Dental Department, University of California.....	0	0	.....	5	\$30	120	\$170	.....	.....	.....	.....	.....	.....	.....	.....
120 Dental Department, National University.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
121 Howard University, Dental Department.....	0	0	.....	5	0	50	.....	1,000	.....	\$10,000	.....	.....	.....	6,700	\$200
122 American College of Dental Surgery.....	0	0	.....	5	0	75	.....	2,000	0	.....	.....	.....	.....	10,000	50
123 Chicago College of Dental Surgery.....	0	0	.....	5	25	100	130	.....	20,000	.....	.....	.....	.....	10,000	.....
124 North-Western College of Dental Surgery.....	0	0	140	5	0	100	180	3,000	.....	0	0	0	1,029	9,487	0
125 Indiana Dental College.....	0	0	.....	5	25	100	90	500	0	.....	.....	.....	.....	2,956	.....
126 Dental Department, State University of Iowa.....	0	0	.....	5	25	50	80	.....	.....	.....	.....	.....	.....	3,965	.....
127 Louisville College of Dentistry, Dental Department of Central University.....	0	1	0	5	30	75	90	1,000	14,000	0	0	0	4,021	4,021	0
128 Baltimore College of Dental Surgery.....	.....	.....	100	5	30	105	88	10,000	.....	.....	.....	.....	.....	10,000	.....
129 University of Maryland, Dental Department.....	.....	10	.....	5	30	125	95	.....	.....	.....	.....	.....	.....	.....	.....
130 Boston Dental College.....	.....	200	.....	5	0	100	.....	.....	.....	0	0	.....	.....	.....	90

TABLE 69.—*Statistics of Schools of Medicine, of Dentistry, and of Pharmacy, for 1887-88.*—PART II—Continued.

[illegible]

CHAPTER XIII.

DEGREES CONFERRED. .

REMARKS ON TABLE 70.

Table 70 presents the classified summary of degrees conferred by colleges and professional schools at the last commencement.

Four per cent. of the whole number were honorary degrees, and of these 97 per cent. were conferred by classical and scientific colleges. Of the degrees in course 45 per cent. are credited to classical and scientific colleges, 6 per cent. to colleges for women, and 49 per cent. to professional schools.

From the classified distribution the relative proportion of the various degrees in course is found to be as follows:

	Per Cent.		Per Cent.		Per Cent.
L. B. or M. E. L.....	2.73	B. M. E. and M. E.....	.70	Art.....	.13
A. B.....	26.	B. Arch.....	.04	D. B.....	2.00
A. M.....	6.	C. and M. E.....	.52	M. D.....	31.06
Sc. B.....	8.60	Mech. E.....	.34	D. D. S.....	3.
Sc. M.....	.75	Ph. B.....	3.14	Ph. G.....	3.39
B. C. E. and C. E.....	1.34	Ph. D.....	.60	L.L. B.....	9.50
B. Agr.....	.01	Mus. B.....	.20	D. V. S.....	.33

Degrees for classical courses represented by A. B. and A. M. form the largest proportion of the whole, viz. 32 per cent. Medical degrees come next, comprising 31 per cent.; degrees in science, including those for general and for special courses, make up 12.3 per cent.

It is worthy of note that 72 per cent. of the degrees conferred by colleges and seminaries for women are A. B. or A. M. degrees. These are indicative either of a classical course or of a course in which French or German has been substituted for Greek.

Of 107 A. M. degrees conferred by colleges or seminaries for women 89 per cent. are reported from the South Atlantic and south central divisions of the country. In these the colleges and seminaries for women for the most part follow the plan of the University of Virginia. They are organized in schools, and confer the degree of A. M. upon those who graduate in all the schools. It can not be pretended that the degree represents the same standards as that conferred by the University of Virginia, but in the colleges for women referred to it appears to be always the sign of a classical course.

TABLE 70.—*Classified Statistical*

State and Class.	All Classes.		Letters.				Science.				
	All Degrees.		In Course, L. B. or M. D. L.	A. B.		A. M.		Sc. B.		Sc. M.	
	In Course.	Honorary.		In Course.	Honorary.	In Course.	Honorary.	In Course.	Honorary.	In Course.	Honorary.
1	2	3	4	5	6	7	8	9	10	11	12
Grand total.....	13,747	566	376	3,533	120	856	45	1,181	6	103	18
Total in classical and scientific colleges.....	6,258	552	233	3,003	116	749	45	1,134	6	86	18
Total in colleges for women.....	853	4	143	506	4	107	.....	47	.....	17	.....
Total in professional schools.....	6,636	10	.....	24	.....	.....	.....	.....	.....	.....	.....
Alabama.....	238	12	40	47	7	41	.....	13	.....	6	.....
Classical and scientific colleges.....	76	12	.....	37	7	2	.....	13	.....	6	.....
Colleges for women.....	104	.....	40	10	.....	39	.....	.....	.....	.....	.....
Professional schools.....	58	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Arkansas.....	43	4	1	11	1	.....	.....	6	.....	.....	.....
Classical and scientific colleges.....	23	4	1	11	1	.....	.....	6	.....	.....	.....
Professional schools.....	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
California.....	205	7	5	33	2	.....	.....	44	.....	.....	1
Classical and scientific colleges.....	111	7	5	33	2	.....	.....	44	.....	.....	1
Professional schools.....	94	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colorado.....	15	.....	.....	3	.....	.....	.....	5	.....	.....	.....
Classical and scientific colleges.....	12	.....	.....	3	.....	.....	.....	5	.....	.....	.....
Professional schools.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Connecticut.....	330	32	.....	174	15	41	.....	8	.....	.....	.....
Classical and scientific colleges.....	315	32	.....	174	15	41	.....	8	.....	.....	.....
Professional schools.....	75	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dakota.....	6	1	.....	4	1	.....	.....	1	.....	.....	.....
Classical and scientific colleges.....	6	1	.....	4	1	.....	.....	1	.....	.....	.....
Delaware.....	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
Classical and scientific colleges.....	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
Professional schools.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
District of Columbia.....	381	4	1	20	1	4	.....	16	.....	.....	.....
Classical and scientific colleges.....	44	2	1	20	1	4	.....	16	.....	.....	.....
Professional schools.....	327	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Georgia.....	322	3	20	58	.....	13	.....	1	.....	7	.....
Classical and scientific colleges.....	92	3	19	48	.....	5	.....	1	.....	.....	.....
Colleges for women.....	56	.....	1	40	.....	8	.....	.....	.....	7	.....
Professional schools.....	174	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Illinois.....	1,064	39	26	128	9	65	.....	76	.....	14	.....
Classical and scientific colleges.....	313	32	13	116	9	65	.....	76	.....	14	.....
Colleges for women.....	28	.....	13	12	.....	.....	.....	.....	.....	.....	.....
Professional schools.....	693	7	.....	.....	.....	.....	.....	.....	.....	.....	.....
Indiana.....	381	27	1	159	14	5	.....	87	.....	.....	.....
Classical and scientific colleges.....	229	27	1	159	14	5	.....	87	.....	.....	.....
Colleges for women.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Professional schools.....	52	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

a Also 3 honorary.

b Also 2 honorary.

Summary of all Degrees Conferred.

Science.						Philosophy.				Art.		Theology.		Medicine.				Law.	
In Course, B. C. E. and C. E.	In Course, B. Agr.	In Course, B. M. E. and M. E.	In Course, B. Arch.	In Course, C. and M. E.	In Course, Mech. E.	Ph. B.	Ph. D.												
In Course.	Honorary.	In Course.	Honorary.	In Course.	Honorary.	In Course.	Honorary.	In Course, Mus. B.	Art.	In Course, D. B.	Honorary, D. D.	In Course, M. D.	In Course, D. D. S.	In Course, Ph. G.	In Course, D. V. S.	In Course, LL. B.	Honorary, LL. D.		
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
185	2	96	5	69	47	532	1	79	29	26	17	211	238	64, 271	362	447	45	1,304	69
185	2	96	5	69	47	530	1	79	29	2	10	8	230	18	1	.....	.....	1	97
.....	2	.....	.....	.....	24	7	233	8	4, 253	361	447	45	1,303	2
15	3	.....	.....	.....	.....	.....	.....	.....	8	7	9	3	29	.....	2	.....	18	2
15	3	.....	.....	.....	.....	.....	.....	.....	8	7	.....	3	.....	.....	.....	.....	.....	2
4	1	1	.....	.....	.....	.....	.....	2	20	.....	.....	.....	.....	.....
4	1	1	.....	.....	.....	.....	.....	2	20	.....	.....	.....	.....	.....
.....	28	.....	1	.....	.....	.....	4	4	51	.....	14	.....	25	.....
.....	28	.....	1	.....	.....	.....	4	4	51	.....	14	.....	25	.....
.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....
.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....
.....	92	.....	.....	.....	.....	.....	29	9	7	.....	.....	.....	39	8
.....	92	.....	.....	.....	.....	.....	29	9	7	.....	.....	.....	39	8
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....
.....	3	.....	.....	.....	.....	.....	13	1	67	13	31	.....	213	2
.....	3	.....	.....	.....	.....	.....	13	1	67	13	31	.....	213	2
5	1	.....	13	.....	.....	.....	.....	.....	1	3	143	6	.....	.....	19	.....
5	1	.....	13	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....
.....	1	.....	.....	143	6	.....	.....	.....	19	.....
.....	45	.....	12	.....	3	1	32	26	354	140	15	.....	73	3
.....	45	.....	12	.....	3	1	.....	19	.....	1	(d)	.....	.....	3
.....	3	.....	32	7	354	139	15	.....	73	.....
5	5	.....	.....	.....	30	.....	1	2	.....	.....	.....	7	88	.....	.....	.....	.....	4
5	5	.....	.....	.....	30	.....	1	2	.....	.....	.....	7	6	.....	.....	.....	.....	4
.....	82	.....	.....	.....	.....	.....

c Includes 23 M. L.

d One honorary.

Summary of all Degrees Conferred—Continued.

Science.						Philosophy.				Art.		Theology.		Medicine.				Law.	
In Course, B. C. I. and C. E.	In Course, B. Agr.	In Course, B. M. E. and M. E.	In Course, B. Arch.	In Course, C. and M. E.	In Course, Mech. E.	Ph. B.		Ph. D.		In Course, Mus. B.	Art.	In Course, P. B.	Honorary, D. D.	In Course, M. D.	In Course, D. D. S.	In Course, Ph. G.	In Course, D. V. S.	In Course, LL. B.	Honorary, LL. D.
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
						39		16			1	1	4	196		4		52	3
						39		16			1	1	4	12					3
														184		4		52	
5											2		4	10				11	1
5											2		4						1
									1				8		4	17		21	1
									1				8						1
														284	4	17		21	
													6	83				28	
													6						
														83				28	
7	8					1							4	21					3
7	8					1							4						3
														21					
						28						4	2	259	53	40		28	
						28							2						
												4		259	53	40		28	
4	4	5	25			9	8				1	27	7	120		49		60	8
4	4	5	25			8	8				1		7						8
						1						27		120		49		60	
12	1		7			32	3						4	138				144	3
12	1		7			32	3						4						3
														138				144	
1	2					4	1						1	28		4		2	
1	2					4	1						1						
														28		4		2	
						5		1					3					15	2
						5							3						2
								1										15	
1	10					5		1	1		1	4	235	28	51			53	2
1	10					5		1	(c)			4							2
														235	28	51		53	

a Includes 2 Ph. D.

b In chemistry.

c One honorary in art.

TABLE 70.—Classified Statistical Summary

State and Class.	All Classes.			Letters.				Science.			
	All Degrees.		In Course, L. B. or M. E. L.	A. B.		A. M.		Sc. B.		Sc. M.	
	In Course.	Honorary.		In Course.	Honorary.	In Course.	Honorary.	In Course.	Honorary.	In Course.	Honorary.
1	2	3	4	5	6	7	8	9	10	11	12
Nebraska.....	23		8	9		1		6			
Classical and scientific colleges.....	25		8	9		1		6			
Professional schools.....	8										
New Hampshire.....	139	16	4	60	7	20		23	1		1
Classical and scientific colleges.....	95	16		50	7	20		23	1		1
Colleges for women.....	11		4	10							
Professional schools.....	30										
New Jersey.....	281	11		211		4		19			1
Classical and scientific colleges.....	264	11		202		4		19			1
Colleges for women.....	9			9							
Professional schools.....	8										
New York.....	1,796	60	29	314	18	82		144	1	8	2
Classical and scientific colleges.....	720	57	29	281	15	80		144	1	8	2
Colleges for women.....	36	3		33	3	2					
Professional schools.....	1,040										
North Carolina.....	134	14	1	91	1	12		24			2
Classical and scientific colleges.....	89	14		48	1	11		24			2
Colleges for women.....	45		1	43		1					
Professional schools.....											
Ohio.....	1,046	54	60	241	15	52	1	72		2	1
Classical and scientific colleges.....	463	54	55	219	15	52	1	57		2	1
Colleges for women.....	42		5	22				15			
Professional schools.....	536										
Oregon.....	20			1		2		4			
Classical and scientific colleges.....	7			1		2		4			
Colleges for women.....											
Professional schools.....	13										
Pennsylvania.....	1,503	75	2	297		105	21	108		15	6
Classical and scientific colleges.....	641	75	2	275		105	21	107		15	6
Colleges for women.....	34			22				1			
Professional schools.....	828										
Rhode Island.....	72	3		38		29					
Classical and scientific colleges.....	72	3		38		29					
South Carolina.....	105	7		75	1	4		4			
Classical and scientific colleges.....	76	7		67	1	4		4			
Colleges for women.....	8			8							
Professional schools.....	21										
Tennessee.....	603	37	27	79		65	3	30		6	1
Classical and scientific colleges.....	134	37		53		37	3	23		6	1
Colleges for women.....	88		27	26		28		7			
Professional schools.....	381										
Texas.....	70	9	19	7		4	4	12			
Classical and scientific colleges.....	55	9	18	3		4	4	11			
Colleges for women.....	11		6	4				1			
Professional schools.....	4										

a Includes 2 in metallurgy.

b Also 2 honorary.

of all Degrees Conferred—Continued.

Science.						Philosophy.				Art.		Theology.		Medicine.				Law.	
In Course, B. C. E. and C. E.	In Course, B. Agr.	In Course, B. M. E. and M. E.	In Course, B. Arch.	In Course, C. and M. E.	In Course, Mech. E.	Ph. B.		Ph. D.		In Course, Mus. B.	Art.	In Course, D. B.	Honorary, D. D.	In Course, M. D.	In Course, D. D. S.	In Course, Ph. G.	In Course, D. V. S.	In Course, LL. B.	Honorary, LL. D.
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1														8					
1														8					
2									1				3	30					3
2									1				3						3
														30					
1					37	1						8	3						7
1					37	1							3						7
												8							
28		29		22	1	72		23	7	3		10	21	584	72	110	45	220	9
28		29		22	1	72		23	7	72	1	1	21						9
												9		584	72	110	45	220	
6									1				10						
6									1				10						
4		3			4	68			3		4	32	25	374	46	27		57	9
4		3			4	68			3		4		25						9
												32		374	46	27		57	
														5				8	
														5				8	
73	2	22		14		27		7	10			11	29	756		3		58	12
73	2	22		14		26		7					29						12
						1			10				11	756		3		58	
						5							1						2
						5							1						2
						1							4	17				4	2
						1							4						2
														17				4	
						8		3		d1	22	21	232					73	4
						8		3		d1	6	21							4
											16		232					73	
4		5				3		12										4	
4		5				3		12					5						
																		4	
																		4	

c Includes 7 in chemistry.

d Also 5 honorary.

CHAPTER XIV.

KINDERGARTENS.

The usual form of tabulating statistics of kindergartens antiquated by their rapid absorption by city school systems—A statistical retrospect at five-year intervals presented in lieu of the customary table, preparatory to its reorganization.—The beginning in 1870—The growth during the first period 1870-75—During the second period 1875-1880—During the third period 1880-85—Attained at the period 1885-88—Why the kindergarten should be a part of the public school system, report of the Boston committee—What, as a public school, it should be, report of the president of the Philadelphia Board of Education—Notes from reports by superintendents of other cities—The growth of the kindergarten fostered by associations—Philanthropy a leading characteristic of such bodies.

The exhaustive fulness of the statistics of kindergarten instruction in the last report of this Office, going so far as to incorporate the lowest classes of institutions for special forms of instruction and requiring the full time of a clerk to make the inquiries and repeated inquiries, has rendered a second full tabulated statement at so short an interval unnecessary.

It is evident that a great change is being made in the character of this class of schools. To use the language of the Philadelphia Society they are becoming the subprimary department of public school systems. Although this tendency has been going on very slowly since the inauguration of a public and experimental kindergarten in the systems of Boston, Cleveland, and St. Louis in 1870 and 1873, the events of the last three or four years have greatly facilitated it.

Now, there are circumstances connected with the public recognition of the usefulness of kindergartens that bear upon the form which the tabulation of their statistics should take. Why should the lowest classes of a system of public schools, because called kindergartens, be isolated and treated as a system of themselves any more than the grammar grade or the intermediate? Or, if such classes are treated separately, because the instruction is sui generis, why should they be intercalated with kindergartens that, being private, have an individuality?

In several instances our forms have been returned with the information that the school having become a part of a public school system, we must apply to its executive officer. And why should the lumped statistics of a system, indeed how may they, be tabulated with those of single schools? Again, kindergarten methods are not confined to kindergarten schools, distinctively known as such; the primary school has "primary school work" which is not the same as the primary school work before the advent of the kindergarten system.

These considerations have induced us to attempt to give the present status of the kindergarten as compared with its condition twenty years ago, and at subsequent intervals of five years; omitting the table, but holding ourselves in readiness to give the statistics of any institution from which we have compiled our summary, on demand. In the meantime the subject of devising proper forms and of making proper distribution will receive our attention.

THE KINDERGARTEN IN 1870.

"The faulty training which too often precedes school work and the imperfections so prevalent in our primary instruction," says our Report for 1870, "have turned the attention of many American teachers to the excellencies of the early training, characteristic of the kindergarten. * * * Neither children nor childhood are sufficiently understood or appreciated. * * * The increasing concentration of our population in cities adds to the necessity of a thorough revision of the earliest work of the school-room throughout the country."¹

In an article by Miss Elizabeth Peabody, of Boston, appearing in the same volume and on the same subject, the practical advantages of the study are thus stated:

"A lady who travelled in Europe to study Froebel's kindergartens brought home from Dresden the whole series of work done by a class of children who began at three years old and continued until seven; and no one has seen it without being convinced that it must have educated the children that did it, not only to an exquisite artistic manipulation, which it is very much harder to attain later, but to habits of attention that would make it a thing of a short time to learn to read, write, and cipher, and enable them to enter into scientific education, and use books with the greatest advantage as early as eight years old. * * * The indispensable preliminary of this new pri-

mary discipline is competent teachers, who can be had only by special training. * * * As yet there is but one kindergarten normal school in America, which is a private one in Boston kept by Mrs. Kriege and her daughters."

Miss Peabody thought the "immediate desideratum to be a free national school to supply kindergarten education to the schools of the District of Columbia, the Territories, and the South, located in the District or, perhaps, in Richmond, Va."

At that time an experimental school had been established at Boston in connection with the public schools and another, though this can hardly be called a part of the system, at Cleveland, the latter under a graduate of Mrs. Kriege's normal school. In California a German lady was maintaining a kindergarten under very adverse circumstances; Dr. Douai had established an institute at Newark, N. J., and Miss Louisa Frankenburg, a pupil and friend of Froebel, was instructing "some superior ladies" in the theory and art of the training at Germantown, a suburb of Philadelphia. The New York school authorities were considering the advisability of making one of three experimental schools a normal school, and "a gentleman," of Springfield, Mass., had established a manufactory of kindergarten material, "a truly public-spirited act," as the outlay would not be returned for years. At St. Louis the subject was receiving great attention, some kindergarten features having been introduced into a primary school.

Such was the condition approximately of kindergarten instruction in 1870. In 1872 W. N. Hailmann, then of Louisville, introduced the following resolution at the meeting of the National Educational Association at Boston:

"Resolved, That a committee of seven be appointed to inquire into the form in which Froebel's principles of education may be most efficiently applied to the educational wants of our country, and to report at our next annual meeting."

The committee was composed of seven—Messrs. Dickinson, Hailmann, Harris, Kraus, Hancock, Baker, and Douai. At the next meeting the committee reported that they recognized in the kindergarten a potent means for elevating primary education and for the development and promulgation of the principles of sound psychology. They recommended that kindergarten institutions, both public and private, be established or their establishment encouraged, and that experiments be initiated to determine the best methods of connecting the kindergarten "with our current educational system." The committee met with four objections: (1) That the training existed only in private and separate institutions; (2) that as the great majority of pupils only spend three years in school, the time should not be wasted in things of less importance than elementary instruction; (3) that as the great majority of teachers are scarcely equal to their present task, it could not be expected they could master "the greater difficulties of kindergarten education;" (4) that two or three years of mere kindergarten instruction would seem to be a mere waste of time to parents wishing their children to learn to read, write, and cipher as rapidly as possible. These objections were dismissed as prejudices.

IN 1875.

The first tabulated statistics published were those which appeared in our Report for 1873, when there were 42 institutions, 73 instructors, and 1,252 pupils. The following summary will show these facts for 1875, not only by States but by groups of States, the period being marked by the introduction of kindergarten training, as an experiment, into the system of St. Louis:

Statistical Exhibit at the close of First Five-Year Period.

	Schools.	Teachers.	Pupils.		Schools.	Teachers.	Pupils.
North Atlantic Division:				North Central Division—Cont'd.			
Maine.....	2	2	45	Wisconsin.....	5	17	299
New Hampshire.....	1	1	14	Minnesota.....	1	1	18
Massachusetts.....	12	20	204	Missouri.....	12	51	496
Connecticut.....	2	6	92	Western Division:			
New York.....	16	33	424	Washington.....	1	1	25
New Jersey.....	13	28	505	California.....	1	2	15
Pennsylvania.....	4	10	88				
South Atlantic Division:				SUMMARY.			
Maryland.....	3	5	91	North Atlantic Division.....	50	100	1,372
District of Columbia.....	7	15	157	South Atlantic Division.....	10	20	248
South Central Division:				South Central Division.....	2	4	53
Kentucky.....	2	4	53	North Central Division.....	31	89	1,066
North Central Division:				Western Division.....	2	3	40
Ohio.....	4	6	78				
Indiana.....	1	1	25	Total for United States.....	95	215	2,809
Illinois.....	5	8	169				
Michigan.....	3	5	89				

Considering the above statistics it is at once evident that the training was sectionalized. Include the District of Columbia and Maryland with the North Atlantic Division, and kindergarten training is confined to that and the North Central Division. Further consideration shows that Massachusetts, New York, New Jersey, Missouri, and the District of Columbia are centres of these centres. It is well known that what Paris is said to be to France, that Washington is to the District; but only five of the schools of Massachusetts are in Boston, only seven of those of New York in the city bearing that name, while the schools of New Jersey are distributed in the towns of the northern part of the State. The Missouri schools are all St. Louis schools. As we are only substituting one form of statistics for another, and not intending to write a history of the rise and progress of the kindergarten in America, we pass to the condition of the training

IN 1880.

Two features mark this period—the spread of the training into the Southern States and its growth as a part of the school system of St. Louis. The exclusion of Washington City and Maryland from the South Atlantic Division now would by no means leave the kindergarten unrepresented in the South, though it must be confessed the number of schools is small; something like the condition of affairs in the West at the 1875 period. In St. Louis the kindergarten had in 1880 grown into a system of the system of public schools; “too much a wheel within a wheel,” says the report for 1881-82 of that city.

Statistical Exhibit at Close of Second Five-Year Period.

	Schools.	Teachers.	Pupils.		Schools.	Teachers.	Pupils.
North Atlantic Division :				North Central Division :			
Maine.....	2	2	80	Ohio.....	12	28	285
New Hampshire.....	1	1	16	Indiana.....	5	12	108
Massachusetts.....	20	41	627	Illinois.....	15	23	533
Rhode Island.....	1	6	64	Michigan.....	6	10	119
Connecticut.....	4	6	71	Wisconsin.....	12	23	452
New York.....	42	101	1,348	Minnesota.....	5	14	108
New Jersey.....	16	37	717	Iowa.....	2	8	83
Pennsylvania.....	27	57	622	Missouri.....	23	90	2,640
South Atlantic Division :				Nebraska.....	1	1	12
Delaware.....	1	1	15	Kansas.....	2	3	65
Maryland.....	5	9	83	Western Division :			
District of Columbia.....	9	19	254	California.....	9	15	340
Virginia.....	2	3	15	SUMMARY.			
North Carolina.....	3	6	55	North Atlantic Division.....	113	251	3,545
South Carolina.....	1	1	67	South Atlantic Division.....	23	41	521
Georgia.....	1	1	12	South Central Division.....	4	5	50
Florida.....	1	1	20	North Central Division.....	83	212	4,415
South Central Division :				Western Division.....	9	15	340
Kentucky.....	1	2	15	Total for United States ...			
Tennessee.....	1	1	12		232	524	8,871
Alabama.....	1	1	.....			
Louisiana.....	1	1	23				

We have noted above that a distinguishing feature of the period 1875-80 is the appearance of kindergartens in the Southern States; let us now briefly examine their rapid increase in the North and West.

In the North Atlantic Division the increase was 126 per cent. in schools (that is, for every four schools in 1875 there were nine in 1880, 150 per cent. (two to five) in teachers, and 160 per cent. (five to thirteen) in pupils. The increase occurs in Massachusetts, about half of it in Boston; in New York, more than half of it in New York City; and in Pennsylvania, about half of it in Philadelphia. Two of these cities have suburbs; Boston has Cambridge; Philadelphia, Germantown. These districts have not been included as a part of the city. To have included them would have required us to include Brooklyn, Jersey City, Hoboken, and perhaps even Newark with New York City; and, having got to Newark, why not take in the whole north of New Jersey?

In the West there is an increase of 168 per cent. in schools, of 138 per cent. in teachers, and of 300 per cent. in pupils. Of this extraordinary increase in pupils (3,319), about 65 per cent. occurred in St. Louis, where over a fourth of the schools were situated and over 40 per cent. of the teachers were employed. Outside of Missouri the increase in Ohio, Illinois, and Wisconsin are noticeable. Cincinnati and Cleveland have between them seven of the twelve schools in Ohio, Chicago eleven of the fifteen in Illinois, and Milwaukee six of the twelve in Wisconsin.

On the Pacific Slope the kindergarten seems to have found an uncongenial soil in the more northern town of Walla Walla, but increased with energy in the more peopled city of San Francisco.

We think that with the completion of this period the novitiate of the kindergarten was finished and that a new conception of its value began to be recognized during the period closing

IN 1885.

In 1870, or thereabout, we find the difficulty was to introduce the kindergarten exercises into the usual school curriculum; during 1880-85 it was another problem how to introduce manual training, exclusive of carpentry shop work, into the same curriculum. The later problem seems to have solved the other. "Construction work" is but the "occupations" of the kindergarten in their theory and practice and the occupations are but the continuation of the "gifts" of the kindergarten as we know it—as a school for very young children only.

In considering the condition of kindergarten affairs at this date, we find that when introduced into the South the kindergarten did not increase with the startling rapidity with which it grew in the North and West. Whether the absence of populous cities had anything to do with this we cannot say, and New Orleans will not favor the supposition. The other features are the rapid strides made in California, that is, in San Francisco, and again in St. Louis, where the schools, teachers, and pupils are once again as large as in 1880. What is said of St. Louis is true of Philadelphia, where, emulating the generosity of Mrs. Shaw in Boston, a free kindergarten was opened about 1879 in a public school building and was supported by six persons, each giving \$100. Sometime after, a society was formed, and in 1882 an appropriation of \$5,000 was obtained from the city councils as an experiment. In 1885 the schools, teachers, and pupils had been doubled.

Statistical Exhibit at the close of Third Five-Year Period.

	Schools.	Teachers.	Pupils.		Schools.	Teachers.	Pupils.
North Atlantic Division:				North Central Division—			
Maine.....	2	3	51	Continued.			
New Hampshire.....	1	1	35	Michigan.....	9	18	427
Vermont.....	1	1	15	Wisconsin.....	31	64	1,835
Massachusetts.....	19	38	641	Minnesota.....	7	12	170
Rhode Island.....	3	9	122	Iowa.....	4	18	202
Connecticut.....	7	19	223	Missouri.....	62	181	5,655
New York.....	41	92	1,532	Dakota.....	3	5	82
New Jersey.....	12	25	440	Nebraska.....	2	3	40
Pennsylvania.....	55	112	1,634	Kansas.....	3	5	134
South Atlantic Division:				Western Division:			
Delaware.....	2	5	42	Colorado.....	2	4	137
Maryland.....	7	15	168	New Mexico.....	1	1	16
District of Columbia.....	12	21	217	Utah.....	1	1	.....
Virginia.....	1	2	22	Oregon.....	2	4	60
North Carolina.....	3	3	38	California.....	34	64	1,579
Georgia.....	2	5	55	SUMMARY.			
South Central Division:				North Atlantic Division.....	141	300	4,698
Kentucky.....	3	4	27	South Atlantic Division.....	27	51	542
Tennessee.....	1	.....	.....	South Central Division.....	10	15	175
Alabama.....	3	2	20	North Central Division.....	195	462	11,573
Louisiana.....	2	9	123	Western Division.....	40	74	1,792
Texas.....	1	.....	.....	Total for United States..			
North Central Division:					413	902	18,780
Ohio.....	26	53	641				
Indiana.....	11	32	622				
Illinois.....	37	71	1,715				

In the North Atlantic Division we find an increase of 25 per cent. in schools, of 20 per cent. in teachers, and of 32 per cent. in pupils; in the West an increase of 134 per cent. in schools, of 118 per cent. in teachers, and of 162 per cent. in pupils. Again, it is in Illinois, Ohio, and Wisconsin that the increase is greatest, and still it is in Chicago, Cincinnati (with Columbus and Cleveland), and Milwaukee that the most of the schools of these States are situated.

In the far West, Colorado, New Mexico, Utah, and Oregon appear, not very decidedly however, for the first time.

IN 1887-88.

We have now arrived at the period which, for all practical purposes, may be called the present. After 1855 the tide of favor set strongly for manual training; and manual training, as this Office uses that term, means education, and as education, has its progenitor in Froebel. We shall speak at considerable length on the subject of manual training, what it is, and how it proceeds, and its condition as a department of school work; and we will, therefore, merely say that it appears to us doubtful whether manual training owes more to the kindergarten for theory, or the kindergarten to manual training for success. In brief, a series of inquiries might be instituted: What is manual training as a theory of education without the theory of Froebel? Would the kindergarten have progressed so fast of late had it not been brought into notice by its "occupations" being adopted by manual training? And last, but not least, had manual training been generally understood to mean education and not industrial training, would it have met with such great success?

Two memorable events have recently occurred in the annals of the kindergarten. In 1887 the schools of the Sub-Primary Society of Philadelphia were formally surrendered to the city, and in 1888 the kindergartens established, and until then wholly supported by Mrs. Pauline Shaw, became a part of the Boston system. We wish to present two facts in this connection. For presenting one—the reasons that may be adduced for adopting or establishing classes taught on the kindergarten plan—we will use the report of the Boston Committee on Examination, while for the other—the relation that such classes should bear to the other departments of the system—we will use the report of the president of the Philadelphia board of education.

WHY THE KINDERGARTEN SHOULD BE A PUBLIC SCHOOL.

In May, 1867, Miss Elizabeth Peabody, Mrs. George R. Russell, and Mrs. A. Hemenway, and others petitioned the school board of Boston for a kindergarten; in 1870 an experimental one was established, and in 1879 abolished.

In 1878 Mrs. Pauline Shaw began founding kindergartens in Boston, and continued her munificence until her kindergartens numbered fourteen and the pupils in them eight hundred. In May, 1887, Mrs. Shaw asked the school board to investigate the value of her schools, and the committee to whom the matter was referred requested that \$20,000 be appropriated for public kindergartens during 1888-89. In their report the committee say:

"All that has been involved in making the experiment, all that saves the public from the trials and inevitable drawbacks attending a new educational enterprise, all that personal devotion can contribute to the success of such an enterprise, has been done for us and for the community.

* * * * *

"Such, then, are our opportunities. We have a number of well-established kindergartens offered for our acceptance; and a sister city, in precisely similar circumstances, having accepted the kindergartens originated by private enterprise, sets the example of the same step to be taken here. Is there any reason why we should not take it? Nay, are there not very strong reasons why we should, and make the kindergarten a part of our school system from this time forward.

"Let us be sure that we understand what a kindergarten is. It is sometimes regarded as much the same thing with a day nursery, to which very young children, especially of the poor, may be sent for safe-keeping while their parents are busy with other cares. But as a day nursery is not, and a kindergarten is a place of training, they are evidently not the same. Neither is a kindergarten a primary school, for its instruments and methods are very different; it does not make use of books, or of common school appliances, nor does it claim or desire that discipline or repression to which our primary pupils are generally subjected. The kindergarten is properly a school to train little children as if they really were little children; to train them certainly but not to subdue them, to give them moral and physical training quite as much as intellectual, and so to give it as to make them glad to receive it and able to avail of it.

"The benefits of such a training to the child are self-evident. * * * This preparation for the instruction to follow is the end and the test of kindergarten training. If this training were to unfit a child for the next grade of schools it would deserve the condemnation sometimes passed upon it, and no proposal to adopt it into the system of our public schools could be entertained. But if it really fits a pupil for a primary school and fits him in such wise that he can do better in a primary school than one who has not received the same preparation, then its incorporation into our system would seem to be a measure against which objections would batter in vain. Can we doubt that a course such as has just been briefly described must of necessity render a pupil more responsive to primary training? There are not very many homes, even among the most favored, that can teach their children as the true kindergarten does.

* * * * *

"The incorporation of the kindergarten into our school system is a measure of equipoise. There is a suspicion that the system as it stands is rather top-heavy; * * * to the majority of public school children the more important end [the lower] has remained unextended. Indeed it may be said to have been curtailed, though not by legislation, for it is a singular fact by no means generally understood that the number of the youngest primary pupils has been diminishing for several years. * * *

"One more reason, and a very sound reason, for adopting the kindergarten into our school system is the beneficial effect to be expected from it in the other grades of training. There can be no question that even before its adoption it has had a mellowing influence upon many of our primary schools, softening their discipline and brightening their lessons through and through. If felt there, the influence must continue to be felt in the grammar schools, to which every pupil carries the spirit formed in earlier years."

To thoroughly examine the question from a practical standpoint the city superintendent sent inquiries to about two hundred primary teachers of the lowest primary class of Boston. From these one hundred and forty-eight replies were received, ninety-nine of which were made by teachers who had had the necessary experience to express an opinion. Eighty-six of these replies were favorable and thirteen unfavorable to the kindergarten. The superintendent summarizes the answers under five heads. Want of space compels us to summarize his summaries:

(1) On the intellectual side the training of the kindergarten quickens the powers of observation, gives clear ideas and the power to express them, aids to learn to read, to compute, to draw, and to write.

(2) On the moral side the training inculcates a sense of justice, generosity, politeness, and truthfulness.

(3) The training is better suited to children five years old than the lowest primary class.

(4) On the point of discipline the opinions are by no means unanimous.

(5) As a protectory the kindergarten is much needed.

It is hardly necessary to add the kindergarten is now a part of the Boston system of public schools.

WHAT, AS A PUBLIC SCHOOL, THE KINDERGARTEN SHOULD BE.

The president of the board of education of Philadelphia in 1887 says: "The year just closed will be memorable as marking the introduction of sub-primary schools as a part of our system—twenty-five of which are now in successful operation. The effect of these schools will be nearly to double the opportunity of children for primary education, by adding two years of earlier training. The statistics of school attendance show clearly that a large percentage of children have but a few years to spend at school, and that many never get beyond the primary school, so the sub-primary schools furnish the only practical means of extending the schooling of this class. * * *

"In making these schools part of a system of public education every care should be taken to adjust them to the necessary conditions of this system as a whole. The difference between the organization and management of numerous schools of this kind by a city department and the conduct of single schools by private agency will demand many changes in order to connect them with the general system. Sub-primary divisions should be recognized in our rules just as other grades are, and principles should receive credit for them, in all respects, as they do for other scholars. They should be provided for as a permanent part of our system, and, in the future, the sum required for their support should be included in the gross sum appropriated, and new divisions formed and authorized in the same manner that other grades are established. The preparation of teachers for these schools is a matter of the first consequence, and action should be promptly taken to complete the permanent establishment of a training department for them.¹ Such arrangements should be made as shall prevent any discrimination against the teachers in these schools as to salary. It appears to me that the term 'kindergarten' is objectionable for many reasons, and that it should be discontinued altogether, and the term 'sub-primary' substituted, as describing more fully and clearly the position and function of these schools in our system."

NOTES FROM REPORTS OF CITY SUPERINTENDENTS.

San Francisco, Cal.—So much of the kindergarten work as was considered suitable and of benefit has been provided for in the lower grades of the schools, and the board of education "very properly" provided the means for instructing the teachers of those grades in such portions of the work as has been adopted. Classes composed of the teachers employed in the "receiving" and eighth grades were organized and put in charge of competent teachers, to be instructed in the first four kindergarten gifts, and the course of study was so modified as to include the work in these gifts in the lower grades, and the

¹ See pp. 406 and 446.

work was assigned for the commencement of the term in August. The superintendent says: "If this system of instruction can be made a successful and valuable adjunct to our public schools, it will be only by means of a class of teachers specially and well trained in the nature of it."

Los Angeles, Cal.—The kindergarten work, commenced last year in one school of the first grade, has proved encouraging and satisfactory. It would in all probability be put into all first grade schools but for the lack of rooms and the expense of the materials.

Bristol, Conn.—A kindergarten association has been formed. Twenty-two gentlemen have signed an agreement to support a kindergarten for two years. A graduate of the kindergarten department of the State Normal School has been placed in charge.

Baltimore, Md.—In speaking of this subject the president of the board of school commissioners observes:

"In a previous report we referred with approval to the subject of kindergarten instruction and reiterate the views then expressed. Although this method of instruction has recently been introduced into this country, yet it has rapidly obtained public favor and is now regarded by intelligent educators as a valuable auxiliary to the primary schools.

* * * * *

"In several cities this system has been adopted in connection with the public schools, and under the management of the board of education. It is intended for those children who are too young to enter the public schools, but ought to receive better attention and training than they often receive in their homes. They are too often neglected by parents who are either unable or unwilling to properly train them, and they are left exposed to temptations and acquire bad habits in early life which are difficult to eradicate when they grow older. The teachers who have charge of these schools commend them for their good influence, and claim that they promote the health of the children, quicken the faculties, cultivate habits of neatness, cleanliness, industry, and kindness, and that these refining influences extend through the instrumentality of the children even to their parents.

"An examination of their work and results in our city shows their value, and that their usefulness should be extended beyond the limited means of private schools; and it may therefore be our duty to establish the kindergarten as a branch of the public-school system; and with that view we ask that the necessary authority be given to the board, in its discretion, to establish these schools."

Gloucester, Mass.—We have spoken of Miss Hovey's effort to further new educational ideas under Manual Training, we have now to chronicle another: The kindergarten at Gloucester having been discontinued—it was evidently supported at Miss Hovey's expense—that lady offered to give the town the outfit and to give the school \$300 annually for two years. Financial limitations obliged the authorities regretfully to decline the generous offer.

Ann Arbor, Mich.—While the most of the primary teachers have for some years used kindergarten methods to some extent, a further adoption of the system of instruction seems called for. "Apparently our present opportunity," says the superintendent, "is to bring the methods of our primary grades more fully into harmony with kindergarten forms and spirit." The encouragement afforded by the board of education will enable this to be carried out.

Pateron, N. J.—The kindergarten has become a department of the system of Pateron. To obtain the necessary teachers a lady of experience was induced to instruct a class of young teachers for this work. The instruction thus far given in the schools covers the first four gifts and the "construction" work of the manual training course. Songs and games are also taught.

Trenton, N. J.—"The proper education of children should include not only the imparting of knowledge but also the development of the faculties," says the superintendent. The board became so well convinced of the advantage of the kindergarten over the usual primary school studies that they authorized a trial of it, and the result has been most gratifying. In the opinion of the superintendent thorough kindergarten work should be introduced into several of the school buildings and proper teachers and material provided.

Albany, N. Y.—Three years ago the experiment of establishing a room for the purpose of preparing the youngest pupils for entrance upon the regular grade work by giving them a few months of semi-kindergarten instruction was tried with such success as to cause similar schools to be opened in all the "primaries." The "kindergarten idea" has been extended, in four schools, by furnishing the regular kindergarten furniture and assigning the work to teachers who have made a special study of kindergarten methods.

Rochester, N. Y.—The work inaugurated by the Free Kindergarten Association in 1887 having proved a success, the board of education adopted the training as a part of the public school system. There are now six kindergartens connected with as many public schools.

Portland, Oregon.—The board of education has permitted the Portland Free Kindergarten Association to use a room in one of the school buildings; "as this district draws public school money for those children of four to six years of age who attend the free kindergarten we feel justified in allowing them the use of this room without charge," says the board.

Pawtucket, R. I.—"I desire," says the superintendent, "to offer two or three suggestions in the nature of recommendations. I want to call renewed attention to what is already before the board—the opening of two or more kindergartens in our city. * * * I respectfully and earnestly urge the importance of this improvement."

Providence, R. I.—"Boston has seen the need and use of them [kindergartens], and Providence has followed in the same direction with the approval and coöperation of its careful superintendent," says the superintendent of Pawtucket.

Statistical Exhibit on or about the Period 1887-88.

	Schools.	Teachers.	Pupils.		Schools.	Teachers.	Pupils.
North Atlantic Division:				North Central Division—			
Maine.....	3	5	95	Continued.			
Vermont.....	1	1	13	Minnesota.....	9	8	341
Massachusetts.....	44	88	1,819	Iowa.....	8	26	501
Rhode Island.....	6	16	359	Missouri.....	274	280	6,678
Connecticut.....	13	32	673	Dakota.....	1	1	16
New York.....	55	114	3,300	Nebraska.....	1	4	50
New Jersey.....	13	23	965	Kansas.....	2	4	65
Pennsylvania.....	51	91	2,218	Western Division:			
South Atlantic Division:				Colorado.....	1	3	105
Delaware.....	1	2	21	New Mexico.....	1	1	19
Maryland.....	10	29	434	Utah.....	1	1	50
District of Columbia.....	10	32	314	Nevada.....	1	1	30
North Carolina.....	1	2	30	Washington.....	1	1	10
Georgia.....	1	1		Oregon.....	6	14	243
South Central Division:				California.....	66	119	3,550
Kentucky.....	1	1		SUMMARY.			
Tennessee.....	2	5	28	North Atlantic Division...	186	370	9,442
Louisiana.....	3	13	227	South Atlantic Division...	23	66	799
Texas.....	4	7	110	South Central Division...	10	26	365
North Central Division:				North Central Division...	225	600	16,614
Ohio.....	30	75	1,170	Western Division.....	77	140	4,007
Indiana.....	13	27	542	Total for United States..			
Illinois.....	50	144	3,048		521	1,202	31,227
Michigan.....	26	25	908				
Wisconsin.....	31	56	3,295				

a Not including public schools, of which the number has not been given to us.

b Sixty-six half-day kindergartens.

During 1887-88, or thereabouts, the foregoing figures show great increases over those of the preceding exhibit, though only three years have elapsed. In the North Atlantic Division the increase in schools and teachers has not been very great, but in pupils has been doubled. In Massachusetts the pupils in attendance are three times as many as attended in 1884-85, while in the other States, with two exceptions, the attendance has doubled. In the South Atlantic States south of the Potomac the kindergarten has not thriven, but Maryland, *i. e.*, Baltimore, has made great advance in enrolment, though the number of schools and teachers have not by any means increased so fast. The South Central States of Louisiana (New Orleans) and Texas have made considerable progress. On the Pacific, California (San Francisco) has more than doubled the enrolment, and almost doubled the number of schools and teachers. In the Mississippi Valley it is not the schools that have increased so much as the teachers and pupils in them, the increase of teachers being 30 per cent., of pupils 50 per cent. The increase of teachers has been greatest in Illinois, Missouri, and Ohio; and in the same States together with Wisconsin the increase in pupils has been largest.

It is evident that the figures are becoming too large to show the doubling and trebling results of earlier periods, and that there are more teachers in a school.

RECAPITULATION.

After having made this brief inquiry—too brief, perhaps, for those who would have the perplexing array of if's, and's, and but's inserted, distracting the attention and of no assistance in coming to a conclusion—it may be thought that we should comment on the statistics we have presented. It is said that Charles James Fox deemed an argu-

ment stated in five different ways four new arguments, and we offer the same plea for presenting the foregoing statistics in a new form. If it is not capable of stirring the dullerest imagination into mentally furnishing a text, we are sure that no words of ours would be of service.

There were at the close of the—

	Schools.	Teachers.	Pupils.
First five-year period.....	95	216	2,809
Second five-year period.....	232	524	8,871
Third five-year period.....	413	962	18,750
Year 1887-88	521	1,202	31,227

KINDERGARTEN ASSOCIATIONS.

When an inventor has patented his device he immediately seeks to form a company with others who have the means to float his invention into public notice; it is getting to be quite the fashion to do the same with educational discoveries, with this difference, however—and a very important one it is—that the educational association is determined to lose money for the public first and last. The dividend is the annual progress made, and the investment is realized on when the “plant” is turned over to the public gratis, as happened in Philadelphia some months ago, when the kindergartens of the Sub-Primary School Society became public property.

It is very true that Mrs. Blow, in St. Louis, and Mrs. Shaw, in Boston, were not societies, but in Philadelphia, San Francisco, Chicago, Indianapolis, and many other cities and towns, we believe, kindergarten work has been established and fostered by associations.

In a number of cases the use of school room has been granted by the school authorities, and the inevitable tendency has been towards the incorporation of this semi-attached school as a part of the regular system. In the case of St. Louis, Philadelphia, San Francisco, Rochester, and Boston, we have seen that this tendency has been consummated.

In examining the motives which actuated the members of these associations we think it is evident that the philanthropic, the charitable, has been more dominant than the strictly educational. We would not be understood as saying that the parents of the children attending the kindergarten were in a less satisfactory condition as to means than the parents of the primary grades, but it would appear that the same idea was not the uppermost in conducting both institutions. The Boston committee, in their report quoted above, further says:

“Of course we are taking for granted that the kindergarten is a strictly educational institution. Time was, and not very long ago, when the education given by it, or by some of the schools called by its name, was of very doubtful value. It may be that this report will be read by some of those to whom the kindergartens they happened to know wore an uncertain aspect. They may be assured that the quality of kindergarten training has greatly improved, particularly during the last few years. All, or almost all, of its abnormal characteristics have disappeared, and it is now pursued with as much common sense, or, we may say, with as much scientific knowledge as any other branch of public instruction. Upon this thoroughly educational character the committee reporting desire to base their appeal for the adoption of the kindergarten by the school board.”

We have now shown how from nothing in 1870 the kindergarten has grown in numbers, and into public favor, until to-day it is becoming, modified in some cases it is true, a part of the public school system. Turning to manual training, the most recent phenomenon in our educational field, a parallel is suggested.

Though in all probability manual training has attained as large a growth as a public school study in five years as the kindergarten has in twenty, nevertheless it has not yet passed through the ordeal of experience and adaptation. To show the present condition of manual training and whence and from what it has sprung is the object of the following chapter.

CHAPTER XV.

MANUAL AND INDUSTRIAL TRAINING.

MANUAL TRAINING: *An exposition, not an argument, attempted—The manual training, the industrial training, and the conservative parties.*

I. AS A PROPAGANDA FOR EDUCATION: *The ideal course—The genesis of the American system—Kindergarten principles and the "Russian System"—Manual training in Sweden, France, England, and Germany—What is meant by manual training as education—Argument of the propagandists—Argument of the conservatives—The arguments compared—Philosophical apparatus and scientific knowledge versus tools and "capacities for useful action"—The special need of manual training for the city boy—Manual training not urged in hostility to the theory of the public schools, but to supply seeming defects of the course with books only.*

II. STUDIES AND CURRICULA: *Drawing—The kindergarten—"Construction," with course in "Hand-Craft" of the Moline (Ill.) schools—Tool instruction, with the course in the "Manual Arts" of New Haven (Conn.) schools; methods and means of Sloyd; the course in a Sloyd school—Sewing, with the course of the Springfield (Mass.) schools—Cooking, with the course of the Washington (D. C.) schools—Modified public school curriculum ("Manual training course of studies") of the experimental New York City schools, in full—The course in the public schools of France.*

III. STATISTICS OF THE COURSE (A) in the Public Schools: *Introduction into the schools of New York City as a tentative—Opinions and discussions of the subject by other educational authorities, from printed reports of city superintendents, special communications, etc.—Associations—Table: Showing number of instructors and the pupils in the several branches of manual training—Table: Number and duration of lessons a week for manual training classes—Table: Cost of introducing and maintaining manual training—Abstract of the statistics, by cities, as returned by superintendents with their remarks, etc.—(B) In Manual Training (High) Schools, Public and Private: *The Imperial Technical School of Moscow—The special professional schools (Gewerbliche Fachschulen) of Germany—French apprentice schools—American manual training schools—Their character as given by their directors—Table: Officers and connection with other institutions—Table: controlling bodies and methods of appointing them—Table: Admission requirements, fees, and length of course—Table: Literary and manual courses of study—Table: Number of instructors and pupils—Table: Finances and property values.**

INDUSTRIAL TRAINING: *Difference of purpose between those urging manual work as a means of education and those who would foster industry—Both parties hope to remove prejudice against laboring with the hands—The socialistic feature of the Paris schools—"Practical party's" view—Distinction between manual labor as manual training, and as industrial training defended, for the present, on difference of aim.*

I. INDUSTRIAL DEPARTMENTS OF SCHOOLS FOR THE SPECIAL CLASSES: *The workshop coeval with the foundation of these schools—Introduced from Europe—Instruction in schools for the deaf, statistics, and remarks—In schools for the blind, statistics, and remarks—In schools for the feeble-minded, statistics, and remarks—In reform schools, statistics, and remarks—In "Industrial schools" and statistics—[For industrial instruction in schools for the colored race, see Chapter XVII.]*

II. TRADE SCHOOLS: *The Williamson, Rindge, and the Pratt Schools—The New York Trade Schools—The Nautical School of New York City.*

MANUAL TRAINING.

In treating of the subject of manual training it is a matter of some degree of delicacy to avoid giving offence either to those who are carrying on the great propaganda or to others who oppose their views; while, if an attempt is made to be non-partisan, a still more unfortunate result may follow, inasmuch as the displeasure of both may ensue.

The witty remark of Sydney Smith, that the great object of a review article is to make men wise in ten pages who have no appetite for a hundred, is not in point here. We have no wisdom to dispense, much less a *theory* to support. To see adopted as a means of awakening thought operations which have for centuries been looked upon as mechanical, using the word in its figurative sense, to hear on one hand a demand for manual labor because the youth who go from the schools are educated against it, and on the other a demand that it shall be introduced because 90 per cent. of these follow a manual occupation, to hear on one side a demand made for manual training as a branch of education and on the other as a branch of industry, and to find the whole subject obscured by a cloud of words, are of themselves quite sufficient to prevent any exertions on our part, either in the field of novelty or paradox.

If, then, this Office can put before the public in a succinct and intelligible manner its statistics and other information, which it finds meager and unsatisfactory, as the State superintendent of New Jersey did that he could get; if it can place in the hands of the reader a body of facts that will enable him to have an intelligent idea of the conflict waged by conservatism against the metaphysics of education by manual labor at one point

and watered communism at an other, it will be abundantly satisfied to leave brilliancy, depth, and originality to the many competent hands who have been and are now developing or opposing the subject.

On one side of this important question are ranged those who, maintaining that the present system of education gives entirely too much weight to the cultivation of certain faculties with which man is born and neglects the development of others more important to the practical affairs of daily life, while on the other are those who, content with the ground plan of our present school system, deny the so-called necessity for this extension of the pale of the public schools, demanding rather that every energy be used in improving the powerful engine of civilization that has gradually grown up among us—one of our most important social if not political institutions they would say, which should not be hampered by engrafting a business course upon it, the function of the public schools not being to produce mechanics. The members of the party of agitation seem to be divided among themselves, though working harmoniously to attain their common object; one party contending for manual training as education, the other considering it in a commercial point of view.

Not only in the educational but in the public press, in every educational meeting whether for discussion or for business, no topic is more common than the subject of introducing manual training into the public schools. While theory has been busy in finding arguments for and conservatism against the introduction of the new department of study, bold spirits have not hesitated to put their views to a test; but experience has not yet had time to give judgment.

It is hoped, therefore, that the pages that are devoted to this subject will be looked upon—and we say it again for the emphasis—as an endeavor to place it on a basis of fact, and not another effort to find reasons for or against it, which have escaped the attention of those whose mastery of the question entitle them to speak.

I.—MANUAL TRAINING AS A PROPAGANDA.

THE MANUAL TRAINING COURSE.

The ideal course of manual training is said to begin in the kindergarten and close with graduation from the manual training (high) school. This ideal we believe has not yet been practiced by any system, though several only lack the kindergarten or one other feature to realize it. At St. Louis, Philadelphia, and Boston, kindergartens are a part of the public school system of the several cities, and it is not improbable that in a comparatively near future all children too young for books will be taught by Froebel's development of Pestalozzian methods. As the child grows older, new tangible work must be provided in course, and the gifts of the kindergarten are to be supplanted in this ideal by "construction work" in clay, card-board, and paper, as now transpires in New York and Washington, D. C. In the upper grammar grade, however, tool work is introduced for the boys, and sewing and cooking for the girls, the first and last subjects requiring the pupils to leave their room, almost always their building. In the manual training school, which is the crown of this pleasing structure, the male pupil having now attained to sufficient strength, is brought face to face with the two great materials of construction, wood and iron, and is made familiar with the construction of that important feature of our age, the steam-engine.

All this is but the tangible work of the instruction; hand in hand with it moves drawing, from slate work and the punching processes of the kindergarten through lines straight and curved, and their final combinations into artistic forms in the intermediate and grammar grades, the study terminating at length in the manual training school with instrumental drawing and shading.

As an artist is said to obtain the material for a picture from many different places, so is this ideal curriculum as whole but the composition of several realities, no system having yet adopted it in full. As the term manual training will be very frequently used in what follows, it is hoped that its meaning will be recognized as covering anything that occurs in the foregoing description that is taught as a means of intellectual development; and that the term industrial training does not mean manual training but another kind of training altogether, such as is given, for instance, at the admirable Trade Schools of New York City, or in schools for the deaf and other special schools.

THE ELEMENTS WITH WHICH THE AMERICAN SYSTEM HAS BEEN FORMED.

The first section of a remarkable body of doctrine, entitled the Theory of Education in the United States, relates that the American school system is an organic growth, meaning, of course, not that growth of feeling of the necessity of the thing which continued appreciation and time engender among a people grown accustomed to civilized life and its conveniences, but an orderly and consistent progress from crude simplicity to full de-

velopment. The manual training course is not such a growth, nor has it sprung into the world, like the goddess in the fable, full grown.

This is not the place to recall the events of twenty years ago that resulted in the introduction into the schools of Massachusetts and other systems of the Union of what is called industrial drawing. The history of that event has been most elaborately dealt with by this Office.¹ Suffice it to say that, Massachusetts having great manufacturing interests centered in large towns, it was but a natural business instinct that a body of highly respected citizens connected with great industries should petition the legislature to devise some plan for "introducing schools for drawing or instruction in drawing free to all men, women, and children in all towns of the Commonwealth of more than 5,000 inhabitants." The report of the State board of education, to whom the matter was referred, says:

"Agents could be employed to go through the Commonwealth and interest the people in this most important subject. Wherever evening classes can be formed of the young and old, free instruction should be furnished in free-hand drawing, and in a few years our enterprising people will begin to discover in our own communities and schools as good artists and artisans as can be found in the most favored portions of other countries."

It appears that the introduction of drawing was a matter of political rather than of educational economy, of material prosperity rather than of intellectual development.

The kindergarten, already in the public schools of France, the place of beginning for manual training, was hardly intended by its American advocates to be an introductory course to the Russian system, but had far higher claims as a rational method of human development adapted to the extremely young; in fact, as a, if not as the, proper way to prepare a child for book work.

To a disinterested reader of the remarks of Mr. Della Vos, of the Moscow school, it does not appear from his language² that he finds himself or those he represents on having given a new development of Pestalozzian methods, but rather it will appear that he takes pride in having analyzed industrial processes, seized the essentials, tested and proved them; of having introduced "a systematical method of teaching the *arts* of turning, carpentering, fitting, and forging."

Of the introduction of tool work into the Boston schools we speak with some diffidence. About 1882 Prof. John M. Ordway, now in charge of the Manual Training Department of Tulane University, made a report on the Swedish system of manual training, called, by those who can intelligently use the word, *Slöjd*.³ A committee of the State board of education, after dwelling on the great similarity of Swedish and American manners and institutions, advocated the introduction of the Swedish system as the only one that "embraces the elements of manual training that aims, precisely as we aim, at manual training rather than industrial education proper." The instruction given in the Dwight school, the committee says, was illustrating that work of this kind could be done.

As to the purpose of construction work, the last of the several features of manual training to appear, there can be no doubt that it was introduced in a purely pedagogical spirit. It has been advocated on such grounds for years by Dr. Felix Adler, of New York, and exemplified by his Workingman's School, a continuation of the Free Kindergarten School; and the gap between the kindergarten and the manual training school (Russian plan) signaled by the New York committee's report on manual training, is being supplied by the adoption of processes somewhat similar to those of the lower grades of this "Workingman's School."

The kindergarten, then, and its extension, construction, are without doubt based on a pedagogical theory pure and simple, and not on the bread and butter argument. Drawing was introduced to foster industry, for "Drawing is the language of mechanics, and ability to use the pencil lies at the foundation of success in many mechanical pursuits." Prof. Della Vos's school is a preparatory institution to the foundry and machinery shop; while the tool work at the Boston grammar school was an isolated fact; no note is made of a preparatory course in construction work and in the kindergarten,⁴ no future in a school on the Russian system.

¹ Art and Industry. Education in the Industrial and Fine Arts in the United States, by Isaac Edwards Clarke, A. M. Part I. Drawing in the Public Schools. Other parts issuing. The title of this comprehensive work reflecting as it does the language of the original resolution by which it was called forth, evinces the ground lines upon which it has been or is being written or compiled by the gentleman who is carrying the work forward. It will be seen that in treating the subject we have spoken, from the educationist's view, as becomes us; our object being to elucidate, so far as in us lies, the value of manual training to our public schools and not the value of industrial training to our industries.

² P. 829.

³ Hereafter this word will be spelled as it is pronounced, *Sloyd*; the unlauded vowel and j having the sound of y, being utterly foreign.

⁴ See page 839. It will be there observed that kindergarten instruction is not industrial or manual instruction, but "another kind." Let it be noted, however, that the above is a report to the board by a committee, and that on page 839 is the report of the State board.

Our distinguishing and peculiar characteristic, if we are to believe foreign critics, is the power we have as a people of adapting existing conditions to our advancement. In no other instance would this power of utilization be exemplified better than in this, were manual training to become universally a part of the public school course. Gradually but surely there appears to be organizing out of the elements never or only slightly attached to the public school curriculum a course of study, too thorough and comprehensive to be called either Russian or Swedish, that may well be styled American.

THE KINDERGARTEN AND THE "RUSSIAN SYSTEM."

In its late report on manual training the committee of the New York Board of Education says that it appears "that the department of education now generally known as manual training was introduced into this country by certain broad-minded practical educators, to whom its educational possibilities presented themselves as its chief claim for adoption;" and further, speaking of manual training and the kindergarten, "Although of widely different origin and purpose, its [the kindergarten's] close pedagogical relations to manual training, and the identity of their fundamental principles, become upon investigation at once apparent."

Now if these two "new and fresh conceptions of true education," as the committee calls them, are identical in "their fundamental principles," they are merely the same thing disguised under different names, and as one of them is "of widely" different "purpose" from the other, each must have, at least may have, two purposes, one conception presumably having been originated to serve one purpose and the other the other. What these purposes are the committee unfortunately do not tell us; and yet it is important to know, so that we may understand for which purpose these fundamental principles are being urged for our rational assent.

A disciple of Froebel might beg to differ with the committee. When the manual training principles are pedagogical he might think with great propriety that they are not in *relation* with kindergarten principles, but *are* kindergarten principles. "Experience and history, too, teach," says Froebel¹, "that men truly and effectively promote human welfare much more by what they put forth from themselves than by what they may have acquired. Every one knows that those who truly teach gain steadily in knowledge and insight; similarly every one knows—for nature herself teaches this—that the use of a force enhances and intensifies the force. Again, to learn a thing in life and through doing is much more developing, cultivating, and strengthening than to learn it merely through the verbal communication of ideas. Similarly plastic material representation in life and through doing, united with thought and speech, is by far more developing and cultivating than the merely verbal representation of ideas"; and, after a few lines, he continues, "For the purpose of teaching and instruction is to bring ever more out of a man rather than to put more and more into him."²

We are aware that philosophers, like those who would patent a device, endeavor to cover as much as possible; but that this is a fundamental—yes, the fundamental doctrine of Froebel—is distinctly claimed by his great disciple, the St. Paul of his system, the Baroness von Marenholtz-Bülow.³ "Pestalozzi, like Froebel," says this lady, "insists that there should be no such thing as instructing children without giving them corresponding sense-impressions and without affording them opportunities of observation and demonstration; in short, no mere word-teaching. Here, however, Pestalozzi stops short of Froebel, who insists still further that children should learn by means of original productiveness. Exercise of the limbs and organs merely as such does not satisfy Froebel, who demands from the very first some result of this childish activity, and moreover a kind of activity which is never purely mechanical, but which exercises the mental powers at the same time as the bodily ones."

But it is perfectly possible to agree with the committee when it says that "manual training," "industrial training," "the use and abuse of tools," as the term was understood or misunderstood before the committee in its valuable report taught us to use

¹ Education of Man (Die Menschenerziehung), translated and annotated by W. N. Hailmann, A. M., p. 278.

² Mr. Herbert Spencer in his epoch making book on education, places the idea in another light; he says: "We are none of us content with unfolding our own individualities to the full in all directions, but have a restless craving to impress our own individualities upon others, and in some way subordinate them. And this it is which determines the character of our education."

We have not attempted to note the influence which Mr. Spencer's celebrated book has had in bringing forward the manual training idea, the connection between the ideas of the writer of the book and the advocates of the new education being indicated by the common use of the expression "preparation for complete living." Such an attempt we feared would add rather to the completeness of our article than to whatever interest or novelty it may have. On page 443, however, under the proceedings of the Ohio teachers' association, there are some remarks on the subject by Supt. Ellis which should be consulted.

³ Hand-work and Head-work (Die Arbeit und die neue Erziehung nach Fröbel's Methode), p. 9, English edition, translated by Alice M. Christie.

the word properly, had a different purpose, at least in its origin. Let Director Della Vos, of the Moscow school, speak for himself:

"In 1868 the school council considered it indispensable, in order to secure the symmetrical teaching of elementary practical work, as well as for the more convenient supervision of the pupils while practically employed, to *separate entirely the school workshops from the mechanical works*,¹ * * * admitting pupils to the latter only when they have perfectly acquired the principles of practical labor."

But this mere separation was not sufficient to accomplish the principal aim. "It was found necessary to work out * * * a *method of teaching the elementary principles of mechanical art*. Everybody is well aware that the successful study of any art whatever, freehand or linear drawing, music, singing, painting, etc., is only attainable when the first attempts at any of them are strictly subject to the laws of gradation and successiveness, when every student adheres to a definite method or school, surmounting little by little and by certain degrees the difficulties to be encountered. All those arts which we have just named possess a method of study which has been well worked out and defined, because, since they have long constituted a part of the education of the well-instructed classes of people, they could not but become subject to scientific analysis, could not but become the objects of investigation, with a view of defining those conditions which might render the study of them as easy and regulated as possible. If we except the attempts made in France in the year 1867 * * * to form a collection of models for the practical study of the principal methods of forging and welding iron and steel as well as the chief parts of joiners' work, and this with a purely demonstrative aim, no one, as far as we are aware, has hitherto been actively engaged in the working out of this question in its application to the study of hand labor in workshops. To the Imperial Technical School belongs the initiative in the introduction of a systematical method of *teaching the arts of turning, carpentering, fitting, and forging*."

The widely different purpose is clearly shown here. It is a method of teaching the arts that are said to be the foundation of all mechanical pursuits, not the method of developing what, as Froebel says, is in the child as an undeveloped individual and is not yet the property of the world.²

As to the pedagogic value of this remarkable doctrine of Froebel, that is a matter with which we have nothing to do. Year by year the kindergarten is bettering its condition. For those advocating manual training on pedagogical grounds it would be suicidal to deny the Froebelian doctrine; and the political economy and conservative parties are only at issue with the followers of its author in asserting that he was mistaken or dreaming. The arguments advanced by the contending parties will be given hereafter in an attempt to fix what one side, the innovating, means by manual training, and the other thinks the innovators mean. At present we will turn to

MANUAL TRAINING IN EUROPE.

Manual work was introduced into the schools of Sweden in 1872 under the name of Sloyd (meaning, it is said, manual dexterity), and in 1882, under the name of l'enseignement du travail manuel, into the schools of France. In Sweden the work is given to volunteers, meritorious scholars, out of school hours; in France it is compulsory on all. In Sweden the subject appears to be in the same condition as with us. In France, the study having been determined upon as beneficial and consequently introduced, is being carried out; the minister of public instruction having, in a circular of 1885, made pub-

¹ The Office has taken the liberty of italicising in this and in several other instances words not so distinguished in the original.

² Some weeks after this chapter had been written we received the reports of the special committees on manual training and educational statistics of New Jersey, in which Mr. Butler, president of the New York Industrial Education Association, expresses views that are very similar to those expressed here. "The principle underlying the kindergarten," he says, "and the manual training school is *one and the same*." And again, after speaking of the early acceptance of the term manual training which meant "exercises in the use of tools employed in working wood and iron," he says that when the St. Louis School and afterward the Chicago School were founded the connotation of the term was broadened to include drawing.

But we will particularly ask the reader's attention to the following language, since to convey the thought put forth in it gave us more concern than all else, "when the principle of the manual training school was attacked and criticised and it became necessary to show on what grounds it could appeal to the public funds for support it immediately became necessary to examine very critically not alone the economic arguments which were urged in its favor, but the educational ends which it was expected to serve. It was at once claimed by its advocates that the manual training school was not a trade school nor a school for apprentices, but an educational institution." So frank an admission from such an authority would have forestalled the preparation of much of this chapter, would have enabled us to assume things that we thought ourselves compelled to show. It is with pleasure that we find our conclusions in unison with the authority from which we have quoted not only here but in other parts of this chapter.

Had manual training been introduced as mind training in the first place it is doubtful if it would now be understood to be trade training, and the change of front, an after-thought on the part of its intelligent advocates when challenged, is, no doubt, and will continue to be viewed with suspicion by many until experiment has proved such suspicions unfounded.

lic complaint that the law of 1862 ordaining the work was far from being completely and generally executed.

IN FRANCE.

In the remarks introducing the programme of manual studies to be followed and the manner of teaching them, the French minister of public instruction observes:¹ "In determining that this instruction shall hereafter be a part of public instruction, the legislator has desired to have it understood above all that work, being at once the support of morality and the source of national prosperity, ought in a *democratic republic* to be not only rehabilitated but brought into honor.

"In addition, the legislator has prescribed that this instruction shall commence with primary school, recognizing that the love of work can only come through the habit of working, and that, reciprocally, the habit of work can only come by implanting the love for it. In short, from this early acquired taste should be engendered a precocious ability, an indispensable condition for future excellence and consequently a condition of economic success in foreign markets.

"It is to the teacher that the task of forming the generations which are to verify these views, not less social than patriotic, is confided; he, then, ought to be responsible to the country, and he will be placed in the rank that he merits according as he attains to the height of his mission or fails therein."

IN SWEDEN.

It has been remarked above that the Boston committee on manual training dwelt upon the resemblance of Swedish and American life and thought. The following would show the propaganda of manual training to be a case in point:

"As a whole," says Director Salomon, of the Nääs Normal School for Sloyd Instructors,² "this agitation for Sloyd instruction is divided into two different movements, which, although confused by superficial observers, in reality have nothing in common except the name. The one is of purely national-economical significance, in that it is based upon the fact that domestic industry is decreasing more and more, and sets itself the task of taking measures to teach the rural population, especially fitting Sloyd labors for home occupation, whose products may be applied either in the house itself, or may serve directly for sale. This Sloyd movement sees in the school the means for extending Sloyd skill. The universal and real claim of the school to be an educational institution for the training of its pupils must, in accordance with this movement, retire into the background before the design to give to the pupil the requisite skill to prepare certain objects destined either for sale or for domestic use. In the choice of such labors, then, the decision must be made from points of view quite other than pedagogical. It can neither be taken into consideration, nor should it be, whether the kind of labor or the method of instruction employed is of a character to influence profitably the education of the child. The objects produced become the essential part; the worker himself, on the other hand, is an incidental part. The support of domestic industry is the solution of the problem, and the most powerful factor thereto—the school—is withdrawn from its actual, definite task, and compelled to serve purposes foreign to it.

"It is wholly different with the other movement that desires to place the Sloyd in the service of the school. Manual labor arranged on pedagogical principles is, in many respects, an extremely efficient means for the education of children. It desires, therefore, to introduce the Sloyd into the school, not for the furtherance of the Sloyd, but because it believes that the school by means of this branch of study will exert an influence, in a manner more perfect and as many-sided as is possible, upon the development of its pupils. Not the products of labor, but the laborers themselves are, according to this idea, the most important part. Whether the objects produced during instruction have a higher or lower market value; whether the children shall in the future perform the same labors or not; whether the kinds of Sloyd with which the pupil is occupied in school are the best fitted for trade and home occupation—all these and other points of view are but incidental. They are as little to be taken into consideration in the arrangement of instruction as though, for instance, in the adoption of a school book its practicableness after the completion of school should be considered; or as if the blackboards, ruled writing books, and copies should be removed from the school room because the children must in the future get along without their aid. The kinds of Sloyd and their methodical arrangement are here only means and must be so regarded. They have, so far as the school is concerned, in themselves no other right save in the measure they are fitted to perform,

¹Instruction spéciale sur l'enseignement du travail manuel dans les écoles normales d'instituteurs et les écoles primaires, élémentaires et supérieures. Mémoires et documents scolaires. Musée Pédagogique, Fas. 8.

²The Sloyd in the Service of the School, translated by William H. Carpenter, PH. D. Monograph of the Industrial Association, New York City.

the especial educational purposes to the attainment of which the school applies them; and the educational value that they have is the only standard by which to judge them.

"A not unimportant part of the opposition which—perhaps less in Sweden than in other countries—has arisen against the introduction of the Sloyd into the school is, without a doubt, based upon a very explicable confusion of these two movements, so different in means and purpose, on the part of such teachers as stand aloof from the movement. Many a teacher, perfectly well cognizant of the difficulties met with in carrying out, even approximately, the many and weighty requirements that are the specific task of the school, perhaps mistakenly believes that Sloyd instruction will necessarily decrease the efficiency of the school and will turn it aside into directions foreign to its educational aims. It is not strange that he will not give his coöperation if he, with all respect for the advantages of domestic industry, still doubts whether it is right to lead the school away from its own high purpose on to foreign ground, however worthy of attention the same may be. The opposition, or at least the impassiveness towards the question of Sloyd instruction, in which teachers often persist, is based accordingly to no slight degree upon a false conception of its real meaning."

IN ENGLAND.

In England Sloyd is attracting great attention. On the 21st of June, 1888, a "Sloyd Association" was organized at the residence of the Earl of Meath, in London, that nobleman acting as president. The objects of the association are: (1) to make Sloyd known to educators and the public generally, and to unite all those who are interested in its promotion; (2) to found a Sloyd training institute for teachers, which shall also serve as a centre where information on Sloyd work and principles can be obtained, and become the headquarters for branches throughout the country; (3) to endeavor to make Sloyd *national* in character by adapting the practical work to English habits and requirements, while adhering to its principles, which are equally true for all countries; (4) to establish a Sloyd register in which shall be entered the names of the teachers and schools whose Sloyd work has been inspected and approved by the association.

Commenting on this movement the able journal from which the information has been taken,¹ after enumerating a number of influential persons in political and educational life who have become officers, observes: "An association so able officered only requires to be well supported by the public to be a brilliant success. It is earnestly hoped that teachers of all grades will join its ranks and give it their hearty support. In order to bring the subscription within the means of all, it has been decided that the minimum annual subscription for *teachers* shall be 2s. 6d."

The late Education Commission, in its report, handles the subject of manual training quite conservatively; it says: "If it should be thought that children ought to receive some instruction in manual employment other than that which the elementary schools available for their use can give, we are of opinion that the best way of meeting the need would be through the establishment of a workshop in connection with some higher institution, which might be willing to receive into the workshop boys of exceptional ability, or others to whom it was considered desirable to give this instruction. One such central institution could do its work cheaper and better than a number of scattered institutions, whilst nothing could be easier than to make arrangements for attendance at this central workshop being substituted on one or two afternoons in the week for attendance at the elementary school."

IN GERMANY.

The Office has no information of the progress of manual training (*Erziehliche Knaben-Handarbeit*) in Germany other than a résumé of the proceedings of the 8th German Congress of educators interested in the subject, held during September 22nd and 23rd, 1888. An abstract of the remarks of two speakers will be given; one presenting the educational, the other the economic side of the question.

Professor Götze, of Leipzig, in speaking of "Industrial Instruction (*Arbeitsunterricht*) in the Service of general Education," remarked that "industrial instruction was not given with a view to teaching a trade, but to help the child in a general way to a harmonious education by means of practical work. Such instruction assisted the physical development of the child; taught him to use his hands deftly and to exercise his mind. It assisted the mental life of the child to develop while supplying him with objects for contemplation, taught him to observe, and afforded him an opportunity for personal experience. It, therefore, assisted the mind in its æsthetic education by showing what is beautiful in form, developing taste, assisting also in overcoming physically difficult but necessary tasks, and finally exerting an influence in the formation of a steady and energetic will.

¹Journal of Education, London, No. 230.

The economic or business view was presented by Herr von Schenckendorff, of Görtitz, who said that during the last fifty years many important changes have taken place in the life of the people and their culture is upon a new basis of development. All culture is accomplished through human labor. Public education must give to the next generation the elements of the knowledge and power already won from the sphere of work, if that knowledge and ability is to be continuously added to. Public education, it is true, gives a general preparation for manual labor by forming the intelligence; but it has as yet hit upon no plan by which an interest is evoked for the calling of a mechanic, or strength or aptitude for it developed, and yet in such work more than nine-tenths of our people are engaged. Is it astonishing, then, if to-day so little inclination exists for the mechanic trades? The child has learned to use his hand in writing and to draw a little, but not for catching hold, not for living forms, not for producing. The eye has been taught, indeed, to see the letters of the alphabet, but the view is not opened for the things of the world. To-day the child leaving the school starts in life with almost a dread of manual work. Thus it follows that at present in the entire circuit of the schools there is an unhealthy shifting of the forces in the direction of social accomplishments which must create the danger of an educated proletariat. Manual labor is looked upon as degrading, and yet by it alone is man able to support himself. Thus is originated a conflict between inclination and necessity, nourishing social discontent. We must learn to value work more according to the industry, the conscientiousness, and perseverance with which it is performed. On these general grounds, therefore, the manual labor school by the side of the literary school (*Lernschule*) is a necessity for our present education.

MANUAL TRAINING AS EDUCATION.

In the foregoing the present condition of manual training as a propaganda has been briefly stated, and the manual training curriculum defined. We have found the new department of study to be, as an ideal at least, a connected series of instructions from the earliest days of school life until the age, comparatively, of discretion has been reached, but that it has not been a growth in the proper sense of the word but rather an adaptation of several elements, introduced as isolated subjects of instruction and not always as educational, to supply inherent defects, so claimed, of our present system of elementary education. We have examined the condition of the subject in foreign lands and have found that only in France has it been thoroughly introduced, whether for purely pedagogical reasons, it is difficult to say; that in Sweden parties are advocating and defending it on lines that wonderfully resemble those drawn here; that England is canvassing the subject, and Germany holding congresses. Possessed of these facts the reader can follow the conflict of the theories of the contending parties at home, as we endeavor to find the cause of contention.

THE MANUAL TRAINING ARGUMENT.

The first argument is that advanced by the great Industrial Association of New York City: its elegant simplicity of style and statement can not but commend it.¹

"The argument for manual training rests upon psychology, and it is only modern psychology that has discovered and emphasized the place that man's powers of expression occupy in the acquisition of knowledge and the development of mental capacity. Manual training is the form of instruction with which it is proposed to appeal to these powers of expression. It consists of two reciprocal parts, drawing and constructive work. The object of the training is to add to the pupil's power of expression by verbal description, the powers of expression by delineation and by construction. Either of the latter powers is simpler and easier than the use of abstract language. It is more natural to be able to draw a sphere, or to make one out of clay or wood, than to comprehend the geometrical definition of a sphere. Yet the curriculum of the ordinary common school has no place for the former, while it devotes much time to the latter mode of expression. It will be seen that the argument thus outlined is a purely psychological or educational one, and takes no account of the social and economic benefits that are known to result from manual training. Though these benefits are great, it is obviously out of place to urge them as other than addenda to the main argument. Many persons lay the greatest stress on the social and economic benefits referred to, and thus confuse the argument for technical education with the argument for manual training in the public schools. 'Industrial education' is the title used to signify the education which includes manual training, but it is also often used as synonymous with technical education. The failure to discriminate between these two significations of the phrase 'industrial education' has caused much confusion, and almost all of the arguments that are advanced against manual training are traceable to a misconception of what manual training really means. Even those teachers and others who advocate manual training are not always clear as to

¹The Argument for Manual Training. Educational Leaflet No. 1, Nov., 1887.

what it means. They often speak of substituting manual training for mental work. This is incorrect. The substitution is of one form of mental work for another. Manual training, in the sense in which it is here used, is mental training. It is a training of the mind to accuracy of perception and truthfulness and readiness of expression. If manual training were non-mental and non-disciplinary it could have no proper place in the public-school course. The schools are not established for the purpose of teaching pupils how to make a living, but to teach them how to live. They are not to teach trades, but to educate.

"The argument for manual training asserts that the power to express and use knowledge is an essential part of the process of acquiring knowledge. It claims that in the past the powers of expression have been neglected in education, and that the appeal made to them in the instruction in reading and writing is not sufficient. It points out, too, that nowhere in the present school course is any provision made for training the judgment and executive faculty, than which no mental powers are of more practical importance. The instruction in delineation and construction, which is included in manual training, appeals directly to both these faculties.

"It will now be seen, it is hoped, that the argument for manual training in the common schools is psychological and educational. It is not economic or utilitarian."

THE CONSERVATIVE ARGUMENT.

In one of the leading educational journals¹ of this country one of the most distinguished educational authorities has expressed views in opposition to the introduction of manual training in the public schools that have attracted considerable notice. As each argument appears unanswerable when considered separately, we will take the liberty of comparing them and endeavor to find wherein they are not in unison. Dr. Dickinson says:

"Suppose, then, it is admitted by those best able to judge, that the proper function of the public school is to furnish the occasions of symmetrical human development, it still remains to determine what are the occasions of this development.

"Human development is produced by the right exercise of power. In school the occasions of this exercise are objects and subjects of thought. These, collected and rightly arranged, constitute our public school courses of study.

"If, therefore, the courses of study used in the public schools are defective, the mental development produced by pursuing these courses will be defective also. In criticising the school, then, we must first turn our attention to defects in the products, and second to the defects in our school exercises that have occasioned the defective products. In criticising results it is said that the children pass out of their classes in school into active life without being prepared for anything. They may have some information, but they seem to have very little actual knowledge. They may be able to understand what is explained to them, but they have neither the ability nor the inclination to produce anything by their own independent activity. They may have some power of thinking, but they cannot realize their thoughts in any product outside their own minds. Their capacities have been trained, but their faculties have been neglected.

"These statements are made by those who, dwelling upon the products of their imaginations, neglect to observe for facts. Nevertheless the criticism has some foundation and directs our attention especially to one defect charged against the schools. This defect consists in a failure to train the children to an independent use of their powers. It is proposed to supply the deficiency by introducing into the school exercises a training in the use of mechanical tools. This is to be done not for the sake of the manual dexterity that may result, but for the general development of active power that may be produced. For no other reason than this can the practice with mechanical tools find a legitimate place in the public schools.

"Admitting that the defects in our present school work actually exist, it does not follow that they are due to defective courses of study nor that they may be removed by adding the operations of the workshop to the list. Both these things are assumed, but neither of them has yet been proved to be true.

"Mere manual dexterity acquired without reference to invention or construction is the product of imitation. To produce it requires a simple practice in imitating a few mechanical motions made as examples to be imitated. After a sufficient number of repetitions the states of mind which are the causes of the movements of the body are hardly the objects of consciousness at all, and the individual moves on under the influence of the mechanical principle of action. Great manual skill is often found with those whose general intelligence is of a low order. If this is true, it follows there is no necessary connection between the two.

¹ Education, June, 1887.

"By long-continued imitation men seem to become very much like the machines they use. In our experiences I am sure we have all found instances of this kind. Such persons become skilled in imitating, but at the same time they may be wanting in independent and progressive power. They may be wanting in that general intelligence which is necessary for the regulation of their private conduct as individuals or of their public acts as members of a self-governed state.

* * * * *

"It does not appear that mechanical dexterity holds any necessary relation to general intelligence or to virtue.

"To cultivate it in the schools must distract the mind from its legitimate disciplinary work and lead it to pursue other and inferior ends. The president of a western industrial institution recently read a paper before a convention of public school teachers which contains the following statement: 'I have not been able to discern such valuable results from hand culture as my friends seem to find. I do not find that the exact construction of a box leads to the exact construction of an English sentence. But mechanical students need as much drill as any others. I have not found that students in mechanical courses are specially good in their mathematical work. On the contrary, I do find that the best workers in wood and metal are they who have clear thoughts and can express them clearly, and who have mathematical ability.'"

If it be considered that the advocates of manual training desire to introduce it not for the general development of mental power, but for the "mere manual dexterity" that may result, Dr. Dickinson certainly repays the compliments that those he opposes have been paying the public school system as to the mechanical manner in which the pupil there performs his tasks. The experience of the president of an institution in the West, though convincing as to the necessity of mental training, would seem to ignore that manual training is not to supersede, but, as it is claimed, to supplement it.

But what is the specific difference between these arguments so far as the latter has been given? On one side a defect is charged, and a remedy—"construction and delineation"—offered. On the other, construction, under the title of mechanical dexterity, is flatly denied as a remedy for the imputed defect and delineation, under the title of drawing, admitted in the following terms:

"Drawing," Dr. Dickinson continues, "has an important educational value, and should be introduced into every public school in the land. It implies a careful and prolonged observation of things to be described. It presents occasions for the free exercise of judgment, imagination, and invention." Nor is there apparently any material difference between the educator and the association as to the result to be obtained by education. In concluding his article Dr. Dickinson uses the following forcible language:

"My friends, if we desire to construct such a system of public instruction for the youth of the country as will best prepare them to discharge with efficiency and fidelity the duties of private and public life, let us make ample provision for the complete training of the powers of observation, for an accurate knowledge of facts, of analysis and comparison, for a knowledge of the relations of things, of generalization and reasoning, for a knowledge of those general truths from which the rules of conduct should be derived, and, above these things, for that training which leads to an all-controlling love for the truth; and the youth will take their places in life elevated above the narrowing effects of any trade, occupation, or profession, and ready to enter upon any service to which they may be called." The association says with emphatic brevity that manual training is a training of the mind to accuracy of perception and truthfulness and readiness of expression. The schools are not established for the purpose of teaching pupils how to make a living, but to teach them how to live.

Construction or mechanical dexterity, as either side may prefer to call it, is then the main point of difference. Now, what defect is it intended to remedy? "Nowhere in the present school course," says the association, "is any provision made for training the judgment and executive faculty than which no mental powers are of more practical importance." "What changes do we need?" says Dr. Dickinson. "If the defect is found in a failure to cultivate practical power, then the change we need is not so much in the course of studies as in the method employed in presenting these courses to the learner's mind. If the children graduate from the schools without the ability to do any independent work, it is because their school exercises did not permit nor require them to do independent work in mastering their lessons. The great reform we need will be introduced by turning the learner's mind from words to things; I do not mean physical things only, but all things which may be made objects of thought. * * * The pupil may become an original investigator by being trained to handle the objects of his investigation. This training leads to self-control and prepares one to take up the work of life with every prospect of success." In this there exists substantial agreement, although Dr. Dickinson speaks rather hypothetically as to the reality of a defect; indeed, the last argument is the more reasoned.

But what kind of investigation? And here it is that the difference appears. Having first recalled to the reader's attention that tool instruction is said to be demanded by the advocates of manual training, we will quote once more and finally from Dr. Dickinson:

"If the children in our elementary schools could be trained to study in a philosophical way the elements of the sciences, they would not only prepare themselves for the future pursuit of the sciences themselves, but at the same time they would be put to those exercises that are best adapted to train the mind to a skilful use of the hand and eye."

PHILOSOPHICAL APPARATUS AND SCIENTIFIC KNOWLEDGE OPPOSED TO TOOLS AND CAPACITIES FOR USEFUL ACTION.

Philosophical apparatus is thus decidedly preferred to tools, as merely requiring a change in the manner of teaching a subject that has already been introduced into academic and perhaps, in some instances, into lower grades of the schools and is now acknowledged to be in harmony with their object. This suggestion is supported by the remarks of a writer in a journal¹ of the highest standing which we quote:

"The pleas for manual training as an educational measure are many, and as the methods employed in instruction must necessarily depend upon the end expected it may not be amiss to examine at least the leading theories.

"Such a critique, nevertheless, based upon the campaign of words, if we may so call them, of the different advocates, in the absence of a full exposition of their views, must be made rather in the form of suggestion than otherwise. Thus the first encountered is that of the *development of perceptions*. One would assume a psychological basis if the age of the pupil corresponded with the programme in view; but in the present application perceptions means sharpness of the sensorium, the first stage of mental growth in the child, generally expected to have been accomplished in the kindergarten; afterward, object teaching in the elements of natural sciences, aided by collections, etc., would do quite as well, and, moreover, would produce as a beneficial result certain general knowledge not attainable from the simple manipulation of tools." It will be observed that "general knowledge" is here balanced with "simple manipulation" to the advantage of the former.

Comparing these suggestions with the statements made by Lord Armstrong, the head of the Elswick Company, which employs 13,000 men and boys, but better known to the American public as Sir William Armstrong, of rifled cannon fame, considerable difference of opinion in this matter is shown. Lord Armstrong, consulting his experience, prefers capacities for *useful action* to the possession of mere knowledge.

In an article entitled "The Cry for Useless Education,"² a reply to a criticism³ by Sir Lyon Playfair, president of the British Association for the Advancement of Science, on Lord Armstrong's article, "The vague Cry for Technical Education,"⁴ this distinguished engineer observes: "A man's success in life depends incomparably more upon his *capacities for useful action* than upon his acquirements in knowledge, and the education of the young should therefore be directed to the development of faculties and valuable qualities rather than to the acquisition of knowledge. * * * I can affirm with confidence that had I acted upon the principle of choosing men for their knowledge rather than their ability, I should have been surrounded by an incomparably less efficient staff than that which now governs the Elswick Works."

It is necessary to ascertain what Lord Armstrong means by knowledge and "capacities for useful action." To give this we will quote from "The vague Cry for Technical Education," an article that caused Sir Lyon Playfair to wonder why the author was not a member of the "Technical Association" of England:

"In expressing my own views on popular education I must address myself in the first place to the present system of primary or elementary education, which is now very generally considered to be ill-adapted as a preparation for the business of life. That system has in my opinion the radical defect of aiming at instruction in knowledge rather than the training of the faculties. * * * Not only should the mind be trained in habits of thought, and in quickness and accuracy of perception, but the hand, the eye, and the ear should all participate in training exercises calculated to make those organs more available as instruments of the mind. * * * Except in teaching the art of writing no attempt is at present made to educate the hand. The addition of drawing would be a step in the right direction, and would afford a useful accomplishment, but would not supply all that is needed for giving dexterity to the hand. Appropriate exercises ought to be devised for cultivating its mobility, precision, and delicacy of touch; and if, in so doing, the ability to use simple tools were acquired *it would be advanta-*

¹ Popular Science Monthly, July, 1883; Manual or Industrial Training, by Prof. G. von Taube.

² Nineteenth Century, November, 1888.

³ Nineteenth Century, September, 1883.

⁴ Nineteenth Century, June, 1883.

geous in any line of life that might be ultimately adopted. Every man and woman would be the better for pre-acquired manual dexterity, but to attempt to teach children special trades and processes of manufacture would, I conceive, be a mistake."

We can now return to the "Cry for Useless Knowledge," and quote some important lines without fear that they will be misunderstood. "Sir Lyon Playfair declares himself an advocate of including within the scope of technical education the teaching of specific trades and industries. I, on the contrary, say that workshops and factories or other places where actual business is carried on are the proper schools for the learning of such trades and industries. Here at once we stand face to face in diametrical opposition. Nor is our agreement more apparent in his definition of the object of technical education, which, he says, is 'to give an intelligent knowledge of the sciences and arts which lie at the basis of all industries.'"

It would certainly appear from the foregoing that Lord Armstrong, though no believer in teaching trades, is strongly in favor of manual training as that term is used here, and that if Sir Lyon Playfair, an enthusiastic advocate of technical training, courted his alliance as one "cool of judgment, unaffected by enthusiasm or emotion," his expression in favor of manual training should be of considerable weight. But it is not our purpose to discuss the respective merits of the two systems for accomplishing the double object of educating the "executive faculty" and giving "dexterity to the hand." Assuming that a "philosophical" study of the sciences, together with the manipulation of scientific apparatus, is equally adequate to accomplish this twofold end, as the advocates of the other system claim that tool and "construction" work are, it would appear that the matter is merely a question of utility—would the ability, capacity, as Lord Armstrong calls it, of making a delicate scientific experiment be of more use in every day life of the great majority than the ability to make a table?

From considering transatlantic opinions let us turn to the consideration of a transcontinental one. The paper from which we shall quote bears the title, "Sense Training and Hand Training in the Public Schools,"¹ by Professor Le Conte, of the State University of California, in which he has the chair of geology and natural history.

Psychical life, he said, is made up of three departments—the senses, the intellect, and the will; that is, observing, thinking, and doing. Development is only possible through the coöperation of these. In natural education the three are coördinate, but they are not coördinate in the artificial education of the school-room, for that is at best but reading, thinking, expressing. By construing passages, solving problems, and writing exercises, good hard work may be obtained, for language, mathematics, logic, and philosophy are admirably adapted to book methods. But book work in science is a sham; of all school studies it is the most trifling. Science must be taught by new methods. Observing and doing must coöperate with thinking. There are three great departments expressly adapted for this coöperation—natural history, drawing, and hand work.

"Hand work, [we regret that our object permits us to give the line of argument on this head only] does not mean trade work," industrial work, as this Office is calling it. "There is a kind of perversity in the average mind on the subject of education. If there be any chance for a wrong point of view it is sure to be taken. This subject, under the title of 'manual training,' has been much discussed of late, but mostly by both friends and foes under a misconception of its true function. It is urged by the people and by many educators because of its supposed practical utility, because it prepares for life in a special way, because it is an apprenticeship to trades. * * * Why should our schools prepare for one pursuit more than another? Why trades more than professions and shop-keeping? By all means let there be trade schools, technical schools, special schools of many kinds if it be deemed necessary, but let not these be connected with our public school system. * * * Hand work, if introduced at all, should be not for making carpenters or blacksmiths, but to train the brain by coöperation of hand and eye."

There are many other matters in the several essays quoted from that are exceedingly worthy of our attention, but space is wanting. It is desirable to fix the connotation of the term manual training as a theory of education; if in the endeavor to do this other points have been brought out, they are incidental. In stating the high claims of instruction in science as practically set forth in Tyndall's "Lessons in Electricity,"² and Huxley's "Practical Biology," Prof. von Taube's article has been quoted from. It is not to be assumed, however, that his attitude is one of hostility towards manual training. "We are far from condemning the instruction, and from making a crusade

¹ Read before the State Teachers' Association of California, December, 1887.

² "Last Christmas it fell to my lot," says Prof. Tyndall in his paper, "to give one of these courses [at the Royal Institution]. I had heard doubt expressed as to the value of science teaching in schools, and I had heard objections urged on the score of the expensiveness of apparatus. Both doubts and objections would, I considered, be most practically met by showing what could be done in the way of discipline and instruction, by experimental lessons involving the use of apparatus so simple and inexpensive as to be within everybody's reach."

against the selection of branches even," he says. "Having visited educational institutions in many countries, the writer considers the American system superior to the others, and as most assuredly answering well the purpose intended. The only question is, whether that purpose is desirable?" To the general objection that "the State has no right to prescribe the future occupation of the growing generation," he would reply by saying, "Has the State the right to educate for no special occupation, although such is unavoidable in actual life?" In short the professor's article is rather an examination of the present condition of educational affairs than an argument for or against manual, or perhaps, as we should say, industrial training.

THE NECESSITY OF MANUAL TRAINING TO THE CITY BOY.

There is another point of view from which this subject of manual training may be considered, and as it will aid in fixing the difference between manual training and industrial or trade training, the indulgence of the reader is asked while a quotation is given from General Francis A. Walker's paper on "Manual Education in Urban Communities."¹ Those who have remarked that our great men have spent their early years on a farm, and who believe in manual training may perhaps, in this, find a reason for their greatness.

"In the country the boy finds a hundred opportunities, alike at work and at play, for acquiring much of that which can only be given to the city boy by way of formal instruction. Whether in his daily stint of labor upon the farm, about the house, the barn, the sheds, or in his sports or rambles upon the village green, over the field, through the woods—the country boy has incessant occasion to use his hands and his eyes; to observe, to plan, to do." The writer then speaks of the benefit of systematic instruction and continues thus:

"Yet in spite of the deficiencies which remain, after almost any amount of spontaneous practice at work or play, or practice under direction from those who are masters neither of the special arts involved nor of the general art of teaching, what the country boy enjoys in the way of training hand and eye to be true servants of the mind; what he enjoys in the way of opportunities and incentives for making the mind itself the real master of life, through a well-round and harmonious development of all the powers, through the creation of the spirit of self-reliance, through the exercise given to the constructive and executive faculty, is almost infinitely greater than that which falls to the lot of the unhappy city boy of to-day. Out of school what has the latter to do with himself, his time, or the energy given to him, as we are wont to say, for some good purpose, though it would puzzle the most devout and the most ingenious to tell for what purpose energy should have been given to a boy condemned to live in a modern city?"

In this effort to fix the meaning of the term manual training as a theory of education one argument—the industrial—has not been examined, and for obvious reasons; it is not an educational argument, but a matter of political economy; not an argument for development of the intellect of the individual, but for rendering him a proper member of a wage-earning community. An examination of this kind would inevitably open up the question, "What shall the public schools teach?" an examination that has no place here. The argument, however, will be noticed under industrial instruction, which forms the second topic treated in the chapter.

MANUAL TRAINING NOT TO SUPERSEDE BUT TO SUPPLEMENT.

If, as Professor Huxley says, the present work of the schools is too bookish; if Lord Armstrong is perfectly correct in asserting that the present system of elementary education has the radical defect of aiming at instruction in knowledge only; if the defect is found in a failure to cultivate practical power, as Secretary Dickinson hesitates to admit and the New York Industrial Association unhesitatingly asserts, then it is a mere truism to say a remedy is needed. The advocates of manual training urge its claims on educational grounds. These grounds we have found are not urged in hostility to the object of the public schools, but rather with the view of assisting them to attain it; in brief the principal difference lies in the manner and means of attaining a desirable end rather than in a difference of aim. These means and this manner will, therefore, receive attention in the following section, in which, since this agitation is European as well as American, we will not scruple to introduce the curricula of foreign nations, or to be liberal in quotation.

Before turning to this inquiry, however, the remark may be ventured that in all countries there appears to be not a little danger that the great advantage that concrete ideas have, in the matter of public comprehension, over abstract ones may give this propaganda the appearance of a socialistic agitation and that at home the advocates of manual training in putting such stress on carpenter's toolwork may be placed in the position of advocating undesirable means rather than a very desirable end.

¹Proceeding of the National Educational Association at Chicago, 1887, p. 196.

II.—MANUAL TRAINING STUDIES AND CURRICULA.

In taking up the study that we have placed first in this presentation of the several elements of the manual training course, we beg to digress so far from the direct treatment of our topic as to explain the methods we have followed. We fear that by many it will be expected of us that we write an infallible scheme for establishing, fitting up, and carrying on a manual training school or course, like complete manuals are being constantly written for "learning to speak, read, and write" a foreign language. Nothing could be more fallacious than such expectation, particularly in regard to the undeveloped subject of manual training. All we can do is to illustrate each study or period of the manual training course by a programme that is in *actual* operation. It must be remembered that our volume is a year book, not an encyclopædia of education, and that it deals primarily with the events of a twelvemonth, and not with the application of the principles of a noble and highly complex science.

DRAWING.

In the preceding section manual training as a theory has been examined; it is now time to examine the means with which it proposes to accomplish its object. Of these drawing stands in the very front rank, not only by reason of its intrinsic value and the appreciation that the public, having grown warm to it, accords, but from the continuity with which as a study it is pursued from first to last. The object of manual training is to add the powers of expression *by delineation* and by construction to the pupil's power of expression by verbal description, says the New York Association.

"For long years," says M. Louise Field,¹ "the public stood with its finger upon the pulse of this alleged intruder, fearful lest it bring disease and disorder; it has now passed the quarantine stage; it is found to be not only safe, but salutary; no longer an alien, it is fast becoming an ally; once a question of 'to be or not to be,' it is now largely a question of 'how to be at its best.' * * * Under the study of a language we may include the thought or the form of its expression, or both. This is no less true of drawing. It is with reference to that which is expressed, rather than the expression, so far as they can be separated, of which I wish more particularly to speak.

"Drawing being essentially the 'language of form,' has in its widest sense the whole visible world as its world. * * * We may recognize the facts of some complicated cathedral; we must recognize those of the cube; we are at liberty to enjoy the most pleasant pictures, but not at liberty to neglect the perspective of a simple prism; nothing excludes us from a knowledge of the most complex ornament; we include among the necessities a knowledge and practice of the elementary principles of decorative design.

"As regards drawing in the normal school I shall assume we are agreed that a part if not the whole duty of its special teacher lies in the selection of these essential features of a common school course, and their presentation, according to the best methods, first by the teacher, second by the pupils in practice teaching, involving, as this must, the educational and practical philosophy underlying the same.

* * * * *

"The advantage of this I hold to be two-fold: First, it is personally educative, begetting that habit of mind which sees nothing as an isolated fact, but as a part of a whole and which ever reaches out through the variety of truths, up to the unity of truth. Second, it is professionally economic. * * * The cone, whose appearance I indicate before recess, becomes the mountain peak of the later morning; and it is that of which I find the solid contents in the afternoon."

Should it be objected that the latter part of the foregoing quotation refers to the training of teachers only, the reader is referred to the testimony of the secretary of the Massachusetts board of education, given on page 834, as to the value of the instruction. As to drawing as a "power of expression by delineation," an extract from a paper read before the National Teachers' Association in 1882, by Professor Woodward, of St. Louis, will illustrate what is meant:

"I desire, for a moment, to direct your attention to the arts of expression. Next in rank to the ability to think deeply and clearly is the power of giving clear and full expression to our thoughts. This last can be done in various ways. As this brings me squarely upon a subject I wish to impress strongly upon you, I will illustrate it by a somewhat elaborate example:

"A gentleman recently called upon me for my opinion concerning a certain automatic brake for freight cars. The device was new to me, but it lay pretty clearly defined in the mind of my visitor. It was not original with him, but for the purposes of my illus-

¹ Drawing in the Normal Schools. Proceedings of National Educational Association, Chicago, Ill., 1887.

tration it might have been. Before I could pass judgment the device must lie clearly in my mind, perhaps more clearly than it did in his; so he set out to express his thought. He was what we call well educated, being a graduate of the oldest university in the land, and was well versed in the conventionalities of spoken and written languages. Accordingly, he proceeded to utter a succession of sounds. His lips opened and shut with great rapidity, and without intermission a series of sounds fell upon my ears. The sounds I heard were quite familiar to me, as I had been listening to them in one order and another for over forty years, and as they had always been associated in my mind with certain concrete things, and the relations of such things to each other, certain thoughts about those things began to take shape in my mind.

"Of course, the sounds I heard had not the smallest likeness to the things called up by them in my mind. * * * The ideas aroused in my mind were confused and fragmentary, and altogether unsatisfactory. Had my friend resorted to writing a description of the invention, in either English, French, German, Latin, or Greek, using in every case a set of purely conventional symbols (to represent the other set of conventional sounds), which we had both spent years in getting some knowledge of, he would have succeeded little better. Whether speaking or writing, much of his thought he could not clothe in words. He therefore abandoned the wholly conventional, or verbal, art of expression and turned to the pictorial.

"But here he soon confessed that his education was deficient. He had never studied the art of representing objects having three dimensions on a surface having but two, and hence he was ignorant of the methods he ought to adopt to express by drawings the objects he was thinking of."

In the quotation from Lord Armstrong's article (p. 835) it has been seen that he advocates drawing as training for the hand, and in his address on "Manual Education in Urban Communities" the president of the Massachusetts Institute of Technology agrees "with Dr. Runkle that drawing in the public schools, not directed upon work in the mechanic arts, is not one-half of what it would be as an educational force had it a definite object." "I look with confidence," he continues, "to see this most interesting and promising study receive a new inspiration wherever the use of tools is introduced into the schools."

It is not necessary to give a programme of a drawing course; the educational public is quite familiar with the subject, and we have only attempted to show its share in "manual training," of which it forms so important a part.

THE KINDERGARTEN.

Whether the kindergarten, like the public school system, the normal school, the school for the blind, drawing, manual training, and an American of educational genius, first appeared upon the soil of Massachusetts, we do not know,¹ but it is not until the report of 1882 of the board of education of that remarkable State that the kindergarten is brought into company, though not associated with manual (or industrial) training. The board says, in discussing the subject of industrial education: "The intense eagerness of the American people to make capital and labor produce the greatest results and the greatest amount of good to the public, will doubtless ere long compel a fuller investigation and discussion of technical education. Its very importance and the complications that may arise in attempting to engraft upon our own peculiar institutions systems that have grown up in other countries and under circumstances widely different from our own,² alike forbid that the subject should be thrust aside without a careful and unprejudiced investigation, or that hasty and inconsiderate attempts should be made to incorporate it into our system of common schools. * * *

"Another kind³ of educational work of rising importance is the peculiar system of elementary training known as the kindergarten—a system which aims by simple and natural methods to lead the child-mind to form habits of observation, of self-activity, and self-development, and thus to become under judicious training a self-educator. The principles of this system seem to be founded upon a knowledge of child nature as learned by wise and observing teachers and mothers. The great importance of our primary schools, the only grade of schools of whose advantages all our children partake, and the general feeling among educators that there is now in these schools too much drudgery, considerable waste of time and effort, and not sufficient attention given to imbuing the

¹ From Boone's Education in the United States (N. Y., 1889) we learn in time to replace a former note that the first kindergarten was opened at Watertown, Wis., by Mrs. Carl Schurz, in 1855. Having been made acquainted with the idea by this lady, Miss Peabody opened a school in Boston, in 1860. In 1867 the school committee of Boston was petitioned by Miss Peabody, Mrs. Russell, and Mrs. Hemenway and others in the matter of kindergarten instruction.

² It will be noticed that in their report the members of the special committee on manual training of the board bear upon the similarity of American and Swedish life (p. 827).

³ These words are not italicised in the original.

child with a fondness for learning, should move us to welcome any light upon the subject that may appear within the sphere of our observation."

This was in 1882, three years after the school committee of Boston had decided to close the kindergarten established in 1870 in connection with the public school for the following reasons:

"It is not denied the school proved a decided success. * * * As the experiment had succeeded, the logical and consistent course would seem to be to establish a sufficient number of such schools to accommodate all children of the kindergarten age; but the expense of such an undertaking * * * seemed to the board too great to assume without a more general and pronounced demand on the part of the public."

At St. Louis, which with Boston, San Francisco, Philadelphia, and New York City have been the great centres of kindergarten work, a kindergarten school was established in connection with the public schools in 1873. Its value for "industrial preparation" was recognized as a "sufficient justification for its introduction into our school system," in 1879, by the superintendent of St. Louis, who continues: "There is much else which is common to the instruction in the school subsequently and occupies the same ground; * * * there is a cultivation of the imagination and of the inventive power which possesses great significance for the future intellectual growth. The habits of regularity, punctuality, silence, obedience to established rules, self-control, are taught to as great degree as it is desirable for pupils of this age, but not by any means so perfectly as the ordinary well-conducted primary school."

To these brief historical notes it is only necessary to add that the great objection to kindergarten training has been that it failed to inculcate those habits of attention and self-control which are deemed necessary in the primary school to promote order and progress. As far as the Office can find, the effort of the advocates of the kindergarten seem to have been directed towards convincing the public that their methods are better adapted than the usual methods of the primary school, to prepare the pupil for the usual school work. They do not appear to be so desirous of bringing into notice its value as manual training.

In the report of the committee on course of study and school-books of the board of education of New York City the connection of manual and kindergarten training is plainly put. The committee says:

"The question of what shall be done for all pupils, boys and girls, is the most important one involved in the consideration of manual training as a part of common-school instruction. It has received the attention of many of our most eminent educators, and the practical results of their careful study and experience are substantially embodied in this report.

"The general features of the plan may be readily understood. Many years ago the kindergarten of Froebel was introduced into this country. Like manual training, it is one of those new and fresh conceptions of true education which must, from time to time, continue to arise with the advance of our knowledge of those scientific principles which underlie all education. * * * Although of widely different origin and purpose, its close pedagogical relations to manual training, and the identity of their fundamental principles become, upon investigation, at once apparent. It is now seen that neither the kindergarten nor manual training has yet reached its full and proper extension and development, and that the wide gap at present existing between the kindergarten and the high school (Manual Training Department of the N. Y. City College?) may be readily filled by extending the methods of the one upward through the primary school and the method of the other downward through the several grades of the grammar school. This will be a safe and proper application of that fundamental principle which should underlie and unify the whole course, namely, the development of certain faculties and aptitudes by the cultivation of the sense perceptions, to insure correct conceptions of form, and to test and manifest their accuracy by embodiment in material."

FROEBEL'S DEFINITION OF EDUCATION AND HIS "GIFTS."

The most trustworthy expounder of a doctrine is the man that originated it, and if his doctrine be commented upon by a disciple of learning and ability, it may be used as though a matter of to-day. Such a doctrine and commentator has recently been given to our educational public in the translation of Froebel's *Education of Man* by Superintendent Hailmann, of La Porte, Ind.

In this work education is said to consist "in leading man, as a thinking, intelligent being, growing into self-consciousness, to a pure and unsullied, conscious, and free representation of the inner law of divine unity, and in teaching him ways and means thereto." Some pages on the author says, "The educator, the teacher, should make the individual and particular general, the general particular and individual, and elucidate both in life; he should make the external internal and the internal external, and indicate the necessary unity of both; he should consider the finite in the light of the in-

finite and the infinite in the light of the finite, and harmonize both in life; he should see and perceive the divine essence in whatever is human, trace the nature of man to God, and seek to exhibit both within one another in life." These, of course, are dictums, generalizations of a meditating mind, but it is perfectly evident that the education that Froebel has in mind is more intended to develop the human soul than ability to struggle for existence.

The kindergarten uses two material means of instruction called respectively gifts and occupations. The gifts are divided into (1) Bodies—balls, cylinder, divisible cubes of several kinds to be taken up progressively; (2) Surfaces—squares and triangles; (3) Lines—straight and circular; (4) Points—seeds, pebbles, etc.; (5) Reconstruction—the construction of lines with points and so on back. The occupations are (1) Solids—plastic clay, card-board work, wood-carving, etc.; (2) Surfaces—paper folding, paper cutting, parquetry, painting, etc.; (3) Lines—interlacing, intertwining, weaving, thread games, embroidery, drawing, etc.; (4) Points—stringing beads, buttons, etc., perforating, etc. "The gift gives the child a new cosmos," says Mr. Hailmann; "the occupation fixes the impression made by the gift. The gift invites only arranging activities; the occupation invites also controlling, modifying, transforming, creating activities. The gift leads to discovery; the occupation to invention. The gift gives insight; the occupation power." This brings us to

CONSTRUCTION WORK (IN PAPER AND CLAY).

This is the new term used to denote the instruction advocated by the New York committee to fill the gap between the kindergarten and the manual training school, in the primary and lower grades.

DR. ADLER'S "CREATIVE METHOD."

About 1880 the Society for Ethical Culture of New York inaugurated what Dr. Adler in an article in the *Princeton Review*¹ calls "A New Experiment in Education."

"With the initiation of the enterprise," says that writer, "the heart had quite as much to do as the head. Those who entered upon it were inspired by the hope of contributing in some degree to the relief of the masses, and were impressed with the belief that an improved educational system is the most efficacious means to this end, indeed, the only measure that promises to pluck up the poisonous weed of pauperism at the root."

What are the means that this new experiment would use to enable it to be efficacious where old ones had signally failed? "What Froebel began in the kindergarten," says the doctor, "is here carried out on a higher plane and with much greater minuteness of detail." The fundamental geometrical conceptions are made clear; drawing and "technical" work are intimately connected; elementary facts of mechanics are inculcated by constructing mechanisms, of physics by constructing, as far as possible, scientific apparatus. The author would call this the creative method. He does not like the ambiguity of "industrial education" and makes some exceedingly caustic remarks on that party which seeks to make the mass of mankind more machine-like than they already are.

CONSTRUCTION WORK AN EXTENSION OF THE KINDERGARTEN.

The Office is not prepared to say that this was the effort that guided the New York committee.² It will be observed that it, too, would extend the kindergarten principles up-

¹ March, 1883, number.

² In his work, "The Manual Training School," Prof. Woodward, of the St. Louis Manual Training School, quotes from an essay read by him before the St. Louis Social Science Association in 1878, in which he said: "The manual education which begins in the kindergarten should never cease. Just how we shall supply the missing links in the chain which joins the kindergarten with the fully equipped shops of the polytechnic schools we cannot with certainty suggest. The problem is an open one, and thousands of earnest and intelligent educators are devoting themselves to its solution." In 1882 Mr. Charles G. Leland, of the Philadelphia School of Industrial Art, was more definite in his line. In Circular No. 4, 1882, of this Office he says: "Of late years it has been definitely ascertained that very little children in the kindergarten organized on the plan of Froebel are capable of developing much more artistic ability than has been supposed; and this, far from straining the mind, strengthens it. If a child can learn to sew, read, sing, draw, and model in the kindergarten, it can surely pursue higher branches, both literary and manual, in higher schools. * * * It is a remarkable law of nature or of humanity that all the minor arts, or such branches of industry as are allied to ornament, are very easy, and can generally be so far mastered in a day by anybody who can draw as to enable the pupil to produce a perfectly encouraging result. But industrial art, to be taught in schools, need not and should not be limited to ornamental work. This is to be at first followed simply because it is the only work easy enough for children and girls. Carpenter's work, or joinery, in its rudiments, or in fact any branch of practical industry, may be taken up as soon as the pupil is fitted for it. Industrial art in schools covers the ground or fills the time intervening between the kindergarten and the industrial school, but it blends with and includes the latter. It is characteristic in this, that the system, as I conceive it, is capable of being introduced into every public or private school in the country or into any institution where there is a preceptor who has some knowledge of drawing, with sense enough to apply it according to certain elementary hand books of art."

ward, but would do it in the following way: "Construction work should consist of work in paper, pasteboard, and other suitable material for boys and girls," and these and clay modelling are the material used. In the first years of the course clay is used in forming geometric solids and forms based upon these as types. Stick laying, a term used to designate the formation of triangles and other geometrical forms; paper folding (paper cut after folding to make simple designs); and tablet laying (cutting forms to represent the surfaces made in clay) are, with drawing, which is used to represent the objects formed, the work of the beginner. From these simple manipulations the pupil advances into more complex forms, always drawing what he makes, or making what he draws. It is understood that in some instances clay or putty is used for work in geography. No information is yet at hand that clay is used in teaching physiology, as it is in the Perkins Institution for the Blind. The implements used in this work are the fingers, a pair of scissors, and a paste-brush.

Carving is also a Froebelian occupation. This, however, is not always included in the manual training course. It forms a part of the course in hand-craft of the Moline, Ill., public schools, where it is introduced in the 4th year. An unburnt brick is the material operated on, and the tool but a dull knife, and not until the 7th year is the pupil put on wood. It should be said that Moline has no carpentry-tool work.

In an essay published by this Office¹ Mr. Leland remarks of wood-carving:

"I consider that, as a general rule, the three branches of design, embroidery, and modelling are the best to introduce into an ordinary school. Yet in some places wood-carving may be preferred by pupils or parents to modelling, as I have known it to be the case in England; or it may in time be added to the three branches already described. For wood carving a very strong common table and about two dollars' worth of good tools and fifty cents' worth of wood to each pupil may be called an outfit. The steps in wood carving from mere drawing to cutting are very gradual. It is to be desired that children in schools should be confined to 'flat cutting,' which is easy and profitable, and not be led at once, as they are in many schools, to ambitious and difficult sculpture 'in the round.'"

The course of the Moline public school will well illustrate construction in paper and clay, and wood-carving.

COURSE IN HAND-CRAFT FOR THE GRADES BELOW THE HIGH SCHOOL, MOLINE, ILL.

"*Object.*—1. To teach the pupil another language (drawing and making), by means of which he may be led to appreciate thought in and to interpret and express thought through form. 2. To develop the æsthetic nature of the pupil, and thereby to increase his capacity for enjoyment through an appreciation of the beautiful in art and nature. 3. To cultivate the industrial disposition by leading the pupil to do what, to him, is distinctively creative work.

"*Time.*—The time designated for drawing on the programme, and one hour every Friday afternoon.

"*Note.*—The work contemplated by this course is not new. With few exceptions it has been done and found wholly practicable under the conditions which make the ordinary school-room. It is not offered as a perfect scheme. It is simply a more definite plan for securing some of the results already recognized as desirable.

"The course provides work for both boys and girls. Much of the work may be given to the whole school at the same time; occasionally it will be found necessary to give boys one thing, and the girls another thing to do at the same hour. Work planned and begun in school may be finished at home if the teacher thinks it advisable.

"Pupils should be led to see that drawing is the basis for most of the making. In the first and second years the pupil passes from the objects to their symbols; after this from symbols to objects."

¹Industrial Art in Schools, by Chas. G. Leland, of Philadelphia, Circular of Information, No. 4, 1882.

First Year.¹

CLAY MODELLING: Simple geometrical forms—sphere, cube, cylinder, hemisphere, square prism, triangular prism. Natural and other forms derived from these, as apple, cherry, peach from sphere; hat, cap, dish, bird's nest, umbrella, toad-stool from hemisphere; book, brick, domino, box from square prism; dice and box from cube; vase, bottle, jug, rolling-pin, spool, fire-cracker from cylinder. Let pupils name other objects that are examples of cube, sphere, etc.

TABLET LAYING: Circle, semi-circle, square, triangle, and oblong, representing the faces of preceding solids. Combined from dictation and invention to form pleasing designs, by horizontal and vertical repetition, and by symmetrical arrangement about a centre. Have pupils cut tablets out of colored paper and combine as above. Examples of circle, triangle, etc.

STICK LAYING: Sticks of different lengths and colors representing edges; joined to represent squares, angles, triangles, oblongs. Ornamental arrangements based upon these. Similar work with sticks and peas, and skeleton representation of solids.

PAPER FOLDING: Square and triangle taken for base form. Have pupils cut paper after folding to make simple designs. Lead pupils to discover familiar objects folded into squares and triangles, as napkins, soldier-caps, fans, etc.

DRAWING: Representation of edges, angles, and faces of solids, derived forms, tablet designs, etc. Lead pencil and paper used for drawing.

Second Year.¹

CLAY MODELLING: Review solids of first year. Take up in the same manner ellipsoid, ovoid, equilateral triangular prism, cone, square, pyramid, and vase form. Natural and other forms derived from these, as plum, lemon, potato, bean, English walnut, leaf, spoon from ellipsoid; egg, acorn, pear, strawberry, leaf, mouse, chicken, spoon from ovoid; carrot or parsnip, top, tumbler, flower-pot from cone; paper-weight, monument from square pyramid. Let pupils name other objects that are examples of ellipsoid, ovoid, etc.

TABLET LAYING: Broad and narrow ellipse, oval, equilateral, isosceles and right-angle triangle representing faces and sections of the solids named above. Combined from dictation, and invention for decorative designs, as in first year. Have pupils make ornamental arrangements, using tablets cut out of colored paper. Combine with tablets of first year.

STICK LAYING: Representation of edges and faces of second year solids. Ornamental arrangements as in first year. Work with sticks and peas, and skeleton representation of second year solids.

PAPER FOLDING: Take base forms of first year and make more difficult designs by folding, and by folding and cutting. By folding and cutting make cube, square prism, triangular prism, etc., bringing edges together without pasting. Make envelopes, etc.

DRAWING: Representation of edges, faces, and sections, derived forms, and tablet designs. Lead pencil and paper used for drawing.

Third Year.

DRAWING: Book 1, Prang's Shorter Course in Form Study and Drawing. Take first the work of the book, then supplement it with as much kindred work as time will permit. Lead pupils to see the language value of drawing, *i. e.*, that they may by means of it represent what has been constructed, and also that they may construct what is represented.

Pupils should and may be led early to see the three distinct uses of drawing in construction, decoration, and representation, and the relation of each to the others.

*Third Year—Continued.***DRAWING—Continued.**

In planning original designs for decoration, pupils should be encouraged to lay out their designs with sticks and tablets before drawing. Let *making* continually accompany the *drawing*. Pupils should be encouraged to look for counterparts of the forms drawn in natural and other objects to be found outside the school-room.

For further directions see Teacher's Manual for "Shorter Course."

PAPER CONSTRUCTION AND DESIGN: Starting with the forms in the drawing book, have pupils construct from the patterns which they draw the hollow forms, leaving laps and pasting. After this they should construct other simple but related objects from patterns, as boxes, envelopes, etc. Pupils should be encouraged to bring a variety of paper boxes and envelopes to school, to be taken to pieces as a class exercise for the purpose of finding how they are made.

Paper of one color may be folded and cut to form a stencil, so that, when pasted over paper of another color, effects in ornamental design will be obtained.

Pleasing ornamental effects may also be produced by cutting out of colored paper a variety of familiar forms previously drawn, and arranging and pasting on other colored paper to make borders, tile designs, rosettes, etc. In this and the stencil work the pupil should be led to use few colors and such only as harmonize.

CLAY MODELLING: Such forms in the drawing work as are suitable for moulding in clay, as shield, quatre-foil, raised and sunken; leaves, etc. Mould leaves on a base or plinth of clay.

In this grade the form should be drawn before it is moulded and the pupil led to compare the two means of expression.

OUTLINE EMBROIDERY: Some of the simple ornamental designs drawn may be worked out with embroidery cotton on butcher's linen, crash, muslin, and other materials. In this way the girls especially will have suggested to them designs for aprons, napkins, tidies, etc., just as pleasing, and much more appropriate, than the pictorial style of decoration which is so common. Teach pupils how to transfer design to cloth, using either perforated stencil or transfer paper.

PLAIN HAND SEWING: Exercises in running and over and over sewing practiced on small pieces of unbleached muslin. Pupils should be taught the size of needle and number of thread best adapted for this work; also the best way to hold needle and cloth when sewing, and how to thread needle quickly and easily.

Fourth Year.

DRAWING: Book 2, Prang's Shorter Course in Form Study and Drawing. Have pupils bring a variety of leaves to school for drawing. Beginning with those having simplest outlines, lead pupils to see how characteristic form may be represented by straight lines (*blocking*), as a step to finished outline. Pupils will be led to study outline of objects more critically and to get better proportions by this process.

For further suggestions and directions see third year work and Manual for "Shorter Course."

SHEET CONSTRUCTION AND DESIGN: For construction, see third year work. Let the forms in Book 2 be made the starting point. Pupils may make these forms in any sheet material that is suitable, working always from a pattern. Lead pupils to discover outside of school what objects are made from sheet material by cutting according to a pattern, and to name the materials thus used.

¹ The work for first and second year is based on the Prang Manual of Form Study and Drawing for Primary Schools.

Fourth Year—Continued.

SHEET CONSTRUCTION AND DESIGN—Continued. Stencils for decoration may be made not only by folding and cutting as in the third year, but by drawing the design on colored paper, and afterwards cutting out and pasting over another color. Pupils may begin to repeat the stencil units to form borders, centre-pieces, etc.

The ornamental work with paper, obtained by cutting units out of one or more colors, and arranging on base of another color, should be carried on as in third year.

In getting ornamental effects with paper, care should be taken not to require forms more difficult than those contained in the drawing-book for this year.

CARVING: Pupils of this grade may be taught to reproduce in low relief or intaglio on unburnt brick, most of the ornamental forms in the drawing-book. This work may be done with no other tool than a dull knife.

OUTLINE EMBROIDERY: In addition to work outlined for third year, the pupils may be taught to embroider in outline simple script initials for marking household articles, as napkins, towels, splashers, doilies, handkerchiefs, etc.

PLAIN HAND SEWING: Exercises in running, over and over, and hemming, practiced on small pieces of bleached and unbleached muslin. See third year for further suggestions and directions.

Fifth Year.

DRAWING: Book 3, Prang's Shorter Course in Form Study and Drawing. See fourth year work for suggestions. Study Manual for "Shorter Course" carefully.

SHEET CONSTRUCTION AND DESIGN: Lead pupils to apply the knowledge already obtained to making small useful articles, as pen-wipers, blotters with sheets fastened together by a ribbon, pencil-cases, match-cases, etc., drawing always preceding the making.

For other work in construction and for use of colored paper, see previous year and Manual.

CARVING: See work for previous year. Take up related work suggested by Book 2.

OUTLINE EMBROIDERY: See work for previous year. This year the work may be made something more than a mere exercise, by encouraging pupils to bring to school such useful articles as have been named, and others, and showing them how to apply their knowledge and skill in decorating and marking them.

PLAIN HAND SEWING: Review running, over and over, and hemming. Teach gathering. Combine these different kinds of sewing in exercises, using small pieces of cloth, or in working upon articles brought from the home. For the exercises use bleached and unbleached muslin and Lonsdale cambric.

Sixth Year.

DRAWING: Book 4, Prang's Shorter Course in Form Study and Drawing. While studying the vase forms pupils should be led to name the curves shown by the profile; to notice also how they are united to secure strength and a pleasing outline.

A short history of some of the more common vase forms will be appreciated by pupils of this grade and cannot fail to prove interesting.

SHEET CONSTRUCTION AND DESIGN: Continue the work in construction, taking up the more difficult single-piece box patterns, examples of which may be found in screw and tack boxes, and in ice cream and candy boxes. Pupils may also be taught to make portfolios of tough manilla paper or other materials, for holding stationery, letters, etc.; also portfolios and cases for photographs.

Sixth Year—Continued.

SHEET CONSTRUCTION AND DESIGN—Continued.

In addition to the work heretofore done in ornamental cutting, designs for registers, iron fences, iron and wooden crests, porch rails, brackets, etc., may be cut out of manilla board. If the design is for iron work the paper may be blackened with turpentine and lamp-black after cutting.

CARVING: See decorative work given and suggested in Book 4. Other ornamental Gothic forms as simple as the ivy leaf on page 8 may be taken for carving.

OUTLINE EMBROIDERY: See fifth year outline. Let pupils design monograms for marking, and embroider them on household articles, etc.

PLAIN HAND SEWING: Review other work. Teach Felling and Patching. Have pupils do patching on at least three kinds of cloth.

Seventh Year.

DRAWING: Book 5, Prang's Shorter Course in Form Study and Drawing. While studying the Fleur-de-lis form on page 7, pupils should learn something about its origin and history—the uses to which it has been put in decorative work.

Pupils should be required to make working drawings of simple objects, these drawings to be passed to other pupils and read, *i. e.*, a pupil who has never seen the drawing should be able to tell what object may be constructed from it.

CONSTRUCTION: Pupils should continue to construct articles out of sheet materials. The boys should be encouraged to construct at home, in wood, a few simple articles, following working drawings made at school.

SHEET DESIGN: Carry on stencil and other work with colored paper as heretofore. Continue work with manilla paper similar to that introduced in sixth year.

CARVING: In addition to carving on brick, give pupils a few simple exercises in low relief wood-carving. After these exercises have been planned and commenced at school, pupils may complete them at home. To fasten the wood to the desk for school-room work, a five-cent clamp should be used. Teach pupils how to transfer their designs to the wood.

OUTLINE EMBROIDERY: Work similar to that previously outlined, only more difficult.

PLAIN HAND SEWING: Review patching. Teach darning in cotton and wool.

Eighth Year.

DRAWING: Book 8, Prang's Text-books of Art Education, Clark edition. The difference in quality of lines used in instrumental and free-hand drawing should be made plain at this stage, and the reasons given therefor. It is quite important that pupils early learn the correct use and handling of drawing instruments, which are taken up for the first time in the exercises of this book.

CONSTRUCTION: See Seventh Year Work.

SHEET DESIGN AND STENCILING: Cut work with colored paper may be discontinued in this grade. Stencils may be cut of suitable paper, and the design stenciled in water-color and bronze upon tinted wall-papers. Continue cut work with manilla paper as in previous years.

CARVING: Let pupils do much carving on wood in this year, not only in exercises, but in decorating panels for cabinets, work-boxes, the ends of book-racks, etc.

OUTLINE EMBROIDERY: See previous work.

PLAIN HAND SEWING: Blind-hemming. Button-holes in cotton and woolen with lining.

TOOL INSTRUCTION.

In the remarks on the ideas connected with the appearance of the several elements of the American system of manual training, tool instruction is spoken of as if first appearing as an elementary school exercise in the Dwight Grammar School of Boston in 1882. This, exactly speaking, is incorrect.

THE GLOUCESTER (MASS.) EXPERIMENT.

In 1878 Miss Marian Hovey placed several hundred dollars at the disposal of the school committee of Gloucester, Mass., to enable it to make an attempt to unite the work of the shop with that of the public school. A shop was provided to accommodate twelve boys, to each of whom a rule, tri-square, hammer, jack-plane, jointer, smoothing-plane, bit-stock and bits, mallet, chisel, etc., was furnished. Forty lessons constituted the annual course, beginning with learning the names of the tools and finishing by making a box. The lessons were first given on Saturdays, but the novelty soon losing its effect, the members preferred their holiday to work, and other arrangements were made.

In 1880 the "carpentry class" was instructed on Monday, Tuesday, Thursday, and Friday (two classes each session) for a half of each afternoon, and the membership immediately advanced from thirty to ninety-six, about thirty of whom (two full classes, another partly) were girls, their work being quite as good as that of the boys. "The result is tangible," says the superintendent, "and the proficiency is measured by no arbitrary standard of percentages, but is clearly defined, and may be estimated with much more precision than in any other line of school work. I do not know of any manner in which fifty to eighty hours can be employed in any form of education where the practical results can be more satisfactorily determined. If the pupil never sees saw, hammer, or plane again, the training he has received will be of value whatever his vocation." This was said in 1880, the year the school was closed. Miss Hovey having spent \$750, refused to continue her contributions and the city board would not carry on the experiment at the public charge.

THE DWIGHT SCHOOL (BOSTON) EXPERIMENT AND ITS PRECURSORS.

On the first Thursday of January, 1882, an instructor, a carpenter, began his course to a class of eighteen boys in the Dwight School at Boston, "all who could be accommodated at the three benches at one time;" but we think that the experiment at the Dwight School was not a result of the founding of the Gloucester school, but that it owed its origin to home influences.

In 1872 a society known by the name of Industrial School Association established in Boston what was called a whittling school, carried on in the chapel of a Boston church of evenings. In 1876-77 this society united its school to the industrial school that had for two seasons been holding its sessions in the Lincoln Building, the supporters of the two schools organizing as one body under the name of the Industrial Education Society. The city gave them the use of the "ward room on Church street," where from 7 to 9 on Tuesday and Friday evenings the school, giving instruction in wood carving, was held. Firm benches were obtained, provided with a vise and carving tools for each of the thirty-two boys, ranging in age from twelve to sixteen. About half the pupils were still attending school.

The report, written in 1877, from which these facts are taken, closes thus: "The object of the school was [at the date of its inception], not to educate cabinet-makers or artisans of any special name, but to give the boys an acquaintance with certain manipulations which would be equally useful in many different trades. Instruction, not construction, was the purpose of this school. * * * Does not this incident show the natural sequence of such a course of hand culture as we have been describing upon the education in drawing now prevalent in our public schools? * * * We cannot but believe that it would be easy to establish in connection with all our grammar schools for boys an annex for elementary instruction in the half dozen universal tools; i. e., the hammer, saw, plane, chisel, file, and square. Three or four hours a week for one year only of the grammar school course would be enough to give the boys that intimacy with tools and that encouragement to the inborn inclination to handicraft, and that guidance in its use, for want of which so many young men now drift into overcrowded and uncongenial occupations or lapse into idleness or vice."

This suggestion may have originated from an acquaintance with the Russian system about that time being made known, although it will be seen by referring to page 827 that in 1882 the special committee of the State board, better informed, perhaps, of the distinguishing characteristic of the Russian system, recommended the Sloyd course as more adapted to a few lessons in a grammar school.

ORIGIN OF THE "CENTRAL SCHOOL."

In 1879 the Industrial Association offered its tools and other outfit to the Boston school committee, hoping that they would maintain the school as a public city school. In the same year the city council was petitioned on this subject, by whom the matter was referred to the school committee, and by that body to a subcommittee. The recommendation of the school authorities that the city should support, wholly or in part, "a developing school and school shops," to be engrafted permanently on the school system, was defeated in the council.

The superintendent of the city schools of Boston having in 1883 objected to shop instruction, as given at Dwight School experiment, on account of the great expense of providing each school with a shop, and having further discountenanced the introduction of manual training into the grammar schools, proposed a school bearing the same relation to the upper grades of the grammar school that the Manual Training School of Baltimore, for instance, now bears to the city high school; that is, a school with a curriculum modified so far as to permit half the day to be given to work and drawing. The school board modified this proposition by establishing a central school in the basement of the Latin School Building for the instruction, once a week for two hours, of a class drawn from each of ten schools. Thus originated the central school feature now so common.

This instruction in tool work is what the New York committee referred to as extending the manual training of the schools on the Russian plan down through the upper grades to meet the upward extension of kindergarten training through primary and lower grammar classes, the so-called construction work spoken of under the preceding head.

The implements used are the common carpenters' tools—hammer, saw, plane, etc., and the course a graded one of about forty exercises arranged in a progressive way. In the majority of cases the pupils are compelled to leave their building to receive the instruction.

To this tool work, in connection with sewing and cooking perhaps, the term manual training has been popularly applied.

As the course of the Moline schools is adapted to convey to the reader what is meant by the conservative form of manual training called construction, so the course in "manual arts" of the New Haven (Conn.) schools will show quite plainly that form of work which its friends call instruction in the care and use of tools, and its enemies "mechanics' tool instruction."

"LESSONS IN THE MANUAL ARTS" (USE OF TOOLS).

"Each tool when it is first used is described, the different parts named, and the way to hold and use it explained. After the boy has learned how to use a tool he is shown how to sharpen it on the oil stone, and is required to keep it in good order.

Lesson I.

HAMMER: Exercises in striking a block of wood with hammer, to show wrist, elbow, and shoulder movements, and to learn to strike "square." Exercises in driving nails of different sizes, perpendicularly, and in drawing them. Exercises in nailing two boards $\frac{7}{8}$ inch thick together, with nails of different sizes driven obliquely, and in drawing them.

CHISEL AND TRY SQUARE: Take board 6 inches square, mark out the corners square with try square and lead pencil; cut them out perpendicularly with 1-inch firmer chisel. Take board 6 inches square, round the corners with 1 inch firmer chisel, cutting perpendicularly; prove with try square.

Lesson II.

CHISEL TO LINE: Take piece 12 inches long, $\frac{1}{4}$ inches wide, $\frac{7}{8}$ inch thick, and mark with rule and compass a pointed arch, at one end, and a round arch at the other end; shape out with 1-inch firmer chisel, cutting with the grain from sides to center of arch.

HALVING: Take two pieces 6 inches long, 2 $\frac{1}{2}$ inches wide, $\frac{7}{8}$ inch thick, and halve them together, using rule, try square, single gauge, scratch awl, back saw, 1-inch firmer chisel, and cutting board. *Always use cutting board to save cutting the bench.*

HALF DOVETAIL: Make a half dovetail with one piece 5 inches long, $\frac{1}{2}$ inches wide, $\frac{7}{8}$ inch thick, and one 4 inches long, $\frac{1}{2}$ inches wide, $\frac{7}{8}$ inch thick, using same tools as in 2, except $\frac{3}{4}$ -inch chisel instead of $\frac{1}{4}$ -inch,

Lesson III.

END MORTISE AND TENON: Take piece 5 inches long, $\frac{1}{2}$ inches square, and form mortice on one end; take piece same size and form tenon at one end; using rule, try square, scratch awl, mortise gauge, back saw, $\frac{3}{4}$ -inch chisel, and bench vise.

BORING: Take piece 3 inches long, $\frac{1}{2}$ inches square, center the sides and ends with single gauge, put in the vise, and bore half way through with $\frac{1}{2}$ -inch bit; reverse, and bore from the other end. Repeat the above, using $\frac{3}{4}$ -inch, $\frac{1}{2}$ -inch, $\frac{3}{8}$ -inch, $\frac{1}{4}$ -inch, and $\frac{7}{16}$ -inch bits.

Lesson IV.

SAWING SQUARE: Take piece 12 inches long, $\frac{1}{2}$ inches wide, $\frac{7}{8}$ inch thick, mark two sides 1 inch from end, with try square and scratch awl, and saw off evenly. Repeat above, sawing off piece $\frac{1}{2}$ inch, $\frac{3}{4}$ inch, $\frac{1}{2}$ inch, $\frac{3}{8}$ inch, $\frac{1}{4}$ inch, and $\frac{1}{8}$ inch.

THROUGH DOVETAIL: Take one piece 4 inches long, $\frac{1}{2}$ inches square, and one piece 3 inches long, $\frac{1}{2}$ inches square, and make through dovetail. Using $\frac{1}{2}$ -inch chisel for cutting.

Lesson V.

JACK PLANE: Take piece 18 inches long, 12 inches wide, $\frac{1}{2}$ inches thick, place on bench, flat side down, end firmly against bench hub, and plane off a few shavings with jack plane, as set. Take the plane apart, naming its parts; put it together and practice setting it, comparing the shavings, until it is set correctly. Take piece 6 inches square, $\frac{7}{8}$ inch thick, mark off the corners, forming an octagon; using rule, compass, and scratch awl. Saw off corners, leaving line, and smooth edges with block plane.

Lesson V—Continued.

CROSS CUT SAW : Take board 8 feet long, 6 inches wide, $\frac{7}{8}$ inch thick, lay off a line with try square and lead pencil, 6 inches from the end, saw off, leaving line. Repeat above, sawing on the line.

Lesson VI.

GROOVING : Take piece 3 inches long, 3 inches wide, $\frac{7}{8}$ inch thick, and make a groove, $\frac{1}{4}$ inch wide, $\frac{1}{2}$ inch deep, through the centre, across the grain, using rule, mortise gauge, try square, scratch awl, back saw, bench hook, $\frac{1}{2}$ inch firmer chisel, bench vise, and cutting board.

Take piece 4 inches long, 3 inches wide, $\frac{7}{8}$ inch thick, cut a tenon on one end to fit groove; using same tools as above; round the ends of both pieces with firmer chisel, using try square to prove correctness of work; put together and test with try square.

RIPPING SAW : Take board 8 feet long, 12 inches wide, $\frac{5}{8}$ inch thick, mark off with single gauge a strip 2 inches wide; put it on the horse and saw to line; then put the board in the bench vise, one end resting on the bench pin; plane with jack plane, and true up with jointer, using try square to prove it. Repeat above, sawing on the line.

Lesson VII.

FRAMING : Saw from stock a strip 2 feet long, 1 inch wide, $\frac{7}{8}$ inch thick, using single gauge and rip saw. Square up with fore plane, trying plane, and try square. Saw off with back saw, piece 12 inches long, for stile, and one 5 inches long for rail. Form mortise in stile, and tenon on rail, using bench vise, back saw, bench hook, 1 inch firmer chisel, $\frac{5}{8}$ inch mortise chisel, and mallet.

Lesson VIII.

FRAMING (completed) : Drive together the pieces prepared in the last lesson and smooth face with block plane.

HALVING : Saw from stock piece 40 inches long, 1 inch wide, $\frac{7}{8}$ inch thick, using rip saw; square it up with jack plane, trying plane, and try square, gauging to thickness and width; cut off two pieces 12 inches long, and two 8 inches long, and halve corners together, making a frame with ends projecting 1 inch.

Lesson IX.

HALVING (completed) : Round the ends of the pieces prepared in the previous lesson, using compass, firmer chisel, and wood file; put together and smooth up with block plane.

SAWING AND PLANING : Saw from stock piece 12 inches long, 2 inches square; square it and plane all sides; cut from stock piece 4 inches long, 4 inches wide, $\frac{7}{8}$ inch thick; square it and plane all sides.

Lesson X.

GAUGING : Centre, with marking gauge, on all sides, from end to end, the 12-inch piece prepared in last lesson. Square off a line all around $\frac{1}{2}$ inch from end, then on that line point off $\frac{1}{2}$ inch on each side of centre on all four sides; from the points thus obtained draw lines obliquely to the corners at the other end; then draw lines from the said points on the line squared off to the centre of the top.

BEVELLING AND CHAMFERING : Bevel with draw knife and plane true, using bevel to prove the work. Chamfer the top to a point, as marked out.

Lesson XI.

DOWELLING : Draw a line through the centre of the base of the column made in the last lesson; point off $\frac{1}{2}$ inch on each side of centre. Make centres with scratch awl to bore from, and bore holes perpendicularly 1 inch deep with $\frac{1}{2}$ -inch twist bit. Glue in $\frac{1}{2}$ -inch dowels, ends to project $\frac{1}{2}$ inch. Centre the piece 4 inches square prepared in Lesson IX. Measure $\frac{1}{2}$ inch on each side; bore perpendicularly holes $\frac{1}{2}$ inch deep. Set gauge $\frac{1}{2}$ inch and gauge round the top and sides; chamfer off, using 1-inch firmer chisel; true up with block plane and try square. Glue together, making column and plinth.

Lesson XII.

DRAW-KNIFE AND PLANING TO LINE : Saw from stock strip 12 inches long, 2 inches square. Square up sides and ends. Gauge off $\frac{1}{2}$ inch from all the corners; put in bench vise; take off corners with draw-knife, and plane to line.

Lesson XIII.

MORTISING : Saw from stock two pieces 12 inches long, $1\frac{1}{2}$ inches wide, $\frac{7}{8}$ inch thick for stiles, and two pieces 8 inches long, $1\frac{1}{2}$ inches wide, $\frac{7}{8}$ inch thick for rails. Square them up. Form mortise in stiles and saw tenon in rails; mortise to be two-thirds the thickness of the stile, rails to enter stiles $\frac{1}{2}$ inch from the end, and tenons to project $\frac{1}{2}$ inch.

Lesson XIV.

MORTISING (completed) : Finish up and fit mortise and tenon, commenced in last lesson, with chisel; round the ends of tenons; drive together, and plane off back and front.

Lesson XV.

GLUE JOINT : Saw from stock two pieces 3 feet long, 3 inches wide, $\frac{7}{8}$ inch thick; plane the edges square, with jack plane, trying plane, and try square; joint together.

Lesson XVI.

BEVELLING : Saw from stock two pieces 3 feet long, 3 inches wide, $\frac{7}{8}$ inch thick; square them up; mark on edge with bevel (set to templet 45°), and plane to bevel with jack plane, fore plane, and trying plane.

Lesson XVII.

BLIND OR MITRE MORTISE : Saw from stock two pieces 6 inches long, 2 inches wide, $\frac{7}{8}$ inch thick; square them up; make mitre mortise and tenon, using try square, scratch awl, mortise gauge, back saw, $\frac{1}{2}$ -inch mortise chisel, and bevel; put the mortised piece in mitre board and plane true.

Lesson XVIII.

BLIND OR MITRE MORTISE (completed) : Drive together the pieces made in last lesson; level off faces and ends with block plane; round the ends to finish.

Lesson XIX.

MITRING : Saw from stock strip 18 inches long, 3 inches wide, $\frac{7}{8}$ inch thick; smooth it up and square it; cut into four pieces 4 inches long; mark corners of each piece on flat side with scratch awl and bevel (set to templet 45°); put in mitre box and saw to line; put in mitre board and true up; fit together and test with try square.

Lesson XX.

MITREING (completed): Glue together the pieces made in the last lesson, and key it, making a frame.

DOVETAIL: Saw from stock two pieces 4 inches long, 3 inches wide, $\frac{1}{4}$ inch thick; square them up; mark for dovetail and saw out.

Lesson XXI.

DOVETAIL (completed): Chisel out and fit the pieces made in last lesson; drive them together and level off with block plane; round the ends.

Lesson XXII.

FRAMING AND WEDGING: Saw from stock one piece 6 inches long, $1\frac{1}{2}$ inches square, and one piece 4 inches long, $1\frac{1}{2}$ inches square; square them up; form mortice $\frac{1}{2}$ inch \times $1\frac{1}{2}$ inches in long piece, using mortice gauge and $\frac{3}{4}$ -inch mortice chisel; form tenon, on short piece, to fit mortice, and to project one inch; cut hole in tenon, bevelled on one side, for wedge, using $\frac{1}{2}$ -inch chisel; drive together and wedge.

Lesson XXIII.

SQUARING TO SIZE: Saw strip $1\frac{1}{2}$ inches wide from $1\frac{1}{2}$ -inch plank; gauge to size; plane with jack plane, and true up with jointer and try square.

Lesson XIV.

PLANING TO WIDTH: Take $\frac{1}{2}$ -inch board about 6 feet long, 8 or 10 inches wide, and saw off strip $4\frac{1}{2}$ inches wide; plane with joiner to $4\frac{1}{2}$ inches; saw off two pieces 8 inches long for sides, and two pieces $4\frac{1}{2}$ inches long for ends of a box; square edges and smooth faces with plane.

Lesson XV.

DOVETAIL: Set single gauge to $\frac{1}{8}$ inch, and square around the ends of pieces prepared in last lesson; mark for dovetails; form dovetails, using $\frac{1}{2}$ -inch and $\frac{1}{4}$ -inch chisel, and cutting from both sides.

Lesson XXVI.

DOVETAIL (completed): Finish up and fit dovetails; glue together and clamp with hand screws, taking care to bring the joints up, and to keep the box square, using try square at every corner.

Lesson XXVII.

SMOOTHING AND SAND-PAPERING: Saw out two pieces $5\frac{1}{2}$ inches \times 9 inches, for top and bottom of box; square up edges and smooth faces; smooth sides and ends of box with block plane; sand-paper clean, and smooth; level off top and bottom edges.

Lesson XXVIII.

NAILING: Nail on top and bottom pieces, with $1\frac{1}{2}$ -inch No. 16 wire nails, being careful to drive the nails straight and in the centre of thickness of sides and ends.

MOULDING: Get piece 40 inches long, $\frac{1}{4}$ inch square, from stock; square to $\frac{1}{2}$ inch, and quarter round with jack plane, making a moulding for bottom of box; get from stock piece 40 inches long, $\frac{1}{2}$ inch square; square to $\frac{3}{4}$ inch, and quarter round, making a moulding for top of box.

Lesson XXIX.

MITREING: Saw moulding, made in last lesson, in lengths to fit box (mitreing the corners in mitre box), and glue them on the box.

Lesson XXX.

BEVELLING: Plane the edges of the top and bottom of box with block plane, to an equal projection all around; mark the top, with single gauge, 1 inch on, and $\frac{1}{2}$ inch down; bevel with $1\frac{1}{2}$ -inch chisel and finish with block plane, and sand-paper block.

Lesson XXXI.

CHISELLING: Cut a hole exactly in centre of top, $1\frac{1}{2}$ inches long, $\frac{1}{4}$ inch wide, using $\frac{1}{2}$ -inch chisel.

Lesson XXXII.

Finish up the box, with mouldings, etc., according to individual fancy.

SLOYD.

The method and means of Sloyd instruction¹ are grouped under—

A. *General principles.*—Attendance at Sloyd instruction should be voluntary on the part of the pupils. In order to do this the work must fulfil the following conditions: (1) It must be useful; (2) it must not require fatiguing preparatory exercises in the use of the various tools; (3) it must afford variety; (4) it must be capable of being carried out by the pupils themselves; (5) it must be real work, not play; (6) it must not be so called knick-knacks, that is, articles of luxury; (7) it must become the property of the pupil; (8) it must correspond with the capabilities of the pupils; (9) it must be of a nature that it can be completed with exactness; (10) it must admit of neatness and cleanliness; (11) it must exercise the thinking powers and not be purely mechanical; (12) it must strengthen and develop the bodily powers; (13) it must assist in developing the sense of form; (14) it must allow of the use of numerous manipulations and various tools.

B. *The teacher.*—(1) The instruction must be given by a trained teacher, if possible by the same teacher who instructs in intellectual subjects; (2) the teacher should conduct, superintend, and control the work, but guarding against directly putting his hand to it.

¹ Pamphlet issued in English by the normal school for Sloyd instruction at Nääs, Sweden, and republished by the New York Industrial Education Association.

C. *The age of the pupil.*—In order to follow with advantage the course of instruction the pupil ought to have reached that stage of development usually attained at the age of eleven.

D. *Branches of instruction.*—The simultaneous employment of several different kinds of Sloyd acts detrimentally for the following reasons: (1) A sufficient number of subjects are already taught in the school, and every branch of Sloyd is a subject in itself; (2) the time to be devoted to this work is short and limited; (3) by different kinds of work the interest of the pupils would be easily diverted.

For the above mentioned standard of age, wood, Sloyd is the most suitable. It includes carpentry, turning, and wood-carving. Sloyd carpentry differs from trade carpentry in the following respects: (1) As to the character of the objects made in general, the objects are smaller; (2) the tools which are used, for instance the knife, which is the most important tool in wood Sloyd; (3) the method of working, in trade carpentry there is division of labor, in Sloyd none whatever. Turnery may be taken as a different branch of instruction, and as such be quite well separated from wood Sloyd.

E. *The number of pupils.*—Individual instruction is generally advisable. This is especially the case with Sloyd, which on fundamental and practical grounds cannot be taught as a class subject; therefore the number of pupils taught by one teacher must be limited.

F. *The models.*—In order to make the instruction as instructive as possible, models ought to be used in preference to drawings. The form should be sketched either directly by placing the model on the piece of wood, or by means of a diagram drawn with a ruler and compass on the wood. The models are to be simple, adapted to reproduction in wood both hard and soft, turned and carved are to be used as much as possible, capable of developing the sense of form and beauty, and so arranged as to teach the use of the necessary tools, and to know and to carry out all the most important manipulations connected with wood, in a series increasing in difficulty of execution, exactitude being demanded, not approximations to the correct form.

The Swedish course is well shown by the description of an English school¹ under an imported Swedish teacher. The class numbered twelve, among whom were two principals of boys' schools, a lady principal of a training college for female teachers, and a young lady who had won honors in Greek at Cambridge.

"The indispensable tool used by the sleight worker is the knife. The Swedish knife has a blade two and one-half inches long, immovably fixed in the handle, and terminating in a long, sharp point. Besides the knife each worker has a pencil, a square, a saw, an awl, perhaps a pair of dividers, and hammer and nails. For general use there are work-benches of Swedish pattern, but not much unlike those used in our best cabinet shops. Besides there are sets of bits, chisels, gouges, and planes. One work-bench and one set of tools suffice for four scholars. The following is a full list of the articles which are to be made by scholars as a result of a course of sleight training:

- | | | |
|-----------------------------------------------------|-------------------------|---------------------|
| 1. Pointer. | 12. Ruler. | 24. Corner bracket. |
| 2. Flower stick. | 13. Knife-handle. | 25. Nail box. |
| 3. Penholder. | 14. Pen-tray. | 26. Sugar scoop. |
| 4. Bird's perch. | 15. First spoon. | 27. Boot-jack. |
| 5. Flower stick (square). | 16. Hammer handle. | 28. Shoe-brush box. |
| 6. Key-label. | 17. Second spoon. | 29. Stool. |
| 7. Slate-pencil holder. | 18. Bracket. | 30. Knife box. |
| 8. Dibbler (pointed stick for setting out flowers). | 19. Stocking stretcher. | 31. Salt box. |
| 9. Forked clothes-pins. | 20. Trencher. | 32. Teapot stand. |
| 10. Paper knife. | 21. Flower stand. | 33. Match box. |
| 11. Flower cross. | 22. Butter beater. | |
| | 23. Footstool. | |

"These articles are carefully arranged in the above list in the order of their difficulty, and each article is made in a manner and by steps definitely prescribed by the teacher. So simple are the first tasks, and so exact the method, that it is not possible for one who follows it to fall short of a certain standard of excellence. The wood used is at first a soft wood like white pine; afterwards a harder wood is employed. Each worker keeps in his own drawer every article made by him or her, marking each with his own name, and receiving all at the end of the course for permanent preservation."

"The great merits of the system appear to be—(1) the moderate difficulty of the tasks proposed; (2) the methodical way in which pupils are instructed; (3) the position, subordinate to the intellectual portion of school work, in which the training is firmly held. The fact that the progress is methodical does not imply that the rate of progress

¹ Leaflet 15 of the New York Industrial Education Association.

is the same for all. Tasks must be done in the same way by all, but each pupil may do as much and go forward as rapidly as his ability permits him. It is a capital merit of the system that it does not profess to confer upon the pupil any handicraft by which he can earn money, but it is strictly disciplinary in its character. The articles which the pupil has made, at the end of his course of study have little market value. They are simple wood utensils, characteristic of a period somewhat prior to the present age of machine products. The articles are not ornaments and would not have money value as such. Hence the learner does not become in any sense a competitor of the mechanic or artisan; but the fact that he has learned to produce good work gives him an interest in all good work by whatever hand produced. This not only qualifies him intelligently to judge of all mechanical work, but gives him that sympathy with the mechanic of which many persons, to their great loss, know nothing."

SEWING.

Instruction in sewing appears to have been introduced in Boston as early as 1835. The teachers of the two lower classes of the grammar schools were authorized to teach plain sewing one hour in the afternoon of 4 days of each week. In 1855 the new regulations provided that instruction in sewing should be given, and that special teachers should be appointed who should give two lessons of one hour each every week; and in the following year sewing was taught in all the grammar schools but one. In 1870 sewing was made obligatory in every girl's school, though not in the three upper classes. In 1873 the subject was made obligatory on all classes of the Winthrop School.

In the Report preceding this the subject is thus spoken of:

"Sewing would appear to be excellently fitted for introduction into the school course, since from its nature the students are not required to leave the class-room while under instruction; and although the superintendents of the evening schools of Brooklyn N.Y., advocate the congregation of those who desire instruction into a class, their recommendation is based on the complaint of individual scholars of the evening schools that they were being retarded in other studies by the time consumed in sewing, and not upon any fundamental difficulty of teaching the art in the ordinary school-room.

"At Boston, where the study has been most thoroughly introduced and organized, even to the extent of holding weekly meetings of the sewing teachers for conference, the course of instruction is, in brief, as follows: After the child has been taught how to select both thread and needle, to thread the needle and to hold it, it is put to basting together a "bag-apron," in which to keep the work; then it is taught to back-stitch, to hem, and to overcast the seams of the basted apron. This method has the advantage, says the supervisor of sewing, of interesting the child, since it is employed in making something that it is to wear. The material is almost invariably furnished by the pupil; the garment is prepared by the teacher and sewed under her direction. Great interest is manifested at the homes of the children, and cases are known in which the child has instructed the mother in the lesson that it has learned at school. In a few schools dressmaking has been introduced; simple dresses, however, are made in all the schools. In concluding her remarks the supervisor says:

"There is no doubt that the habits formed in connection with learning to sew have an important influence on the life and character of the girls and of their homes. It may be confidently asserted that the influence of the sewing is healthful and lasting upon the mind and character of the pupils, and on that account, no less than for its material utility, it deserves the respect and encouragement of the community. As a department of school work it is second to none in the success which it has attained, and the interest it has enlisted in and out of the school-room."

Mr. Philbrick, under whom as city superintendent sewing made such strides in Boston, says, in treating of the subject in a publication of this Office:¹

"The most important practical conclusions arrived at by the writer are formulated in the following propositions:

"(1) No girl can be properly educated who cannot sew. It would be a waste of time to demonstrate the importance of this part of a girl's education.

"(2) If this education were left to the homes it would be imperfect or wholly neglected, especially in the homes where it would be of the greatest practical utility.

"(3) That sewing should be an obligatory branch of instruction in all elementary public schools where girls are taught is both desirable and practicable.

¹ Monsieur B. Buisson, in his report to the French minister of public instruction on the late educational exhibit at New Orleans, says: "It is surprising that America should be so behindhand in adopting sewing as a public school study. The only sewing exhibit by an elementary school worthy of comparison with the good schools of Europe came from Boston." * * * But it is in Boston especially after the advent as superintendent of Mr. Philbrick, who had visited many European schools, that instruction in sewing has been thoroughly organized."

In Belgium, France, Germany, Austria, Switzerland, Italy, Portugal, Sweden, Norway, Denmark, Netherlands, and in England sewing has been introduced to a greater or less extent.

"(4) The instruction should begin with girls when about eight years of age and continue throughout the elementary course, from one to three hours a week being given to the lessons.

"(5) The course of instruction should be graded, beginning with plain sewing and mending and advancing to cutting and fitting.

"(6) The regular teachers might give the instruction in the lower grades, the employment of special teachers being limited to the upper classes.

"(7) Ability to teach sewing ought to be reckoned among the essential qualifications of a teacher of girls in the lower classes of elementary schools.

"(8) In large cities regional classes should be established, after the plan in Paris, for instructing in advanced needlework girls who have graduated from the elementary schools and others qualified for admission.

"(9) In cities of the first magnitude, and perhaps those of the second also, the system of instruction in sewing should culminate in a central school for teaching the most advanced stages of practical needlework, including dressmaking and millinery.

SEWING COURSE OF THE SPRINGFIELD (MASS.) SCHOOLS.

Grade IV.—First term: Fold, baste, back-stitch, overcast, fold, and hem (make narrow hem). Second term: Wide hem, sew salvage over and over, sew folded cloth over and over, stitch, make a bag. Third term: Review previous work; make a pillow-slip.

Grade V.—First term: Gather, lay gathers, baste gathers, baste gathers on to band, make an apron. Second term: Stitch a seam, fold, fell, cut-stitch, cross-stitch, feather-stitch. Third term: Darning, patching, sew on buttons, cut a straight piece and join, cut a bias piece and join.

Grade VI.—First term: Button-hole stitch, cutting button-hole, overcast, bar and work. Second term: Cut patterns, put on cloth, mark and cut. Third term: Cut by pattern.

COOKING.

The cooking school first appeared in 1874 in New York City, instruction being given to poor women and girls at an institution supported by one of the many charitable organizations of that city. Soon after, 1874 or 1875, a school was opened in Boston, and early in 1879 benevolent ladies of the school and of the Women's Educational Association opened a cooking school for the mission-school children similar to that in New York. Two classes were taught every day in the week, and every alternate Saturday a lecture was given. In a letter to this office in 1879 the lady chairman of the industrial committee of the Young Women's Christian Association of Boston says:

"We need a *free* cooking school after this method; we need also some preparatory work done in the public schools—simple talks to girls on all home matters. * * * Only one hour twice a week is allowed to each room [of the Winthrop School, of Boston] for learning to sew. * * * I think that the same time might also be again advantageously taken for elementary lessons in housework, and without disadvantage to 'analysis' and 'perspective.'" It is evident that this lady did not believe in any intrinsic relation between drawing and cooking—representation and construction.

It is claimed by the committee on manual training schools that the school known as the Boston School Kitchen No. 1, established in 1885, and supported by Mrs. Hemenway, was the first public school of its kind. The investigation of the New York committee on manual training showed that cooking had only been introduced at Boston and Toledo.

It is extremely supposable that on first sight the connection of cooking with mental development would not be appreciated, or at least its influence only recognized as indirect. General Walker, in an article read to the National Educational Association in 1887, speaks very positively on this subject, remarking: "But we are not driven to defend the introduction of cooking into the public schools as an invasion of the proper field of education, justified by due necessity. No one can spend an hour in the cooking schools of Boston * * * without being impressed by the very high education value of the instruction given. As a great object lesson in chemistry; as a means of promoting care, patience, and forethought; as a study of cause and effect; as a medium of conveying useful information, irrespective altogether of the practical value of the art acquired; the short course which alone the means at command allowed to be given to each class of girls has constituted, I do not doubt, the best body of purely educational training which any girl of all those classes ever experienced within the same number of hours."

COURSE IN COOKING OF THE WASHINGTON (D. C.) SCHOOLS.

First Year (Seventh Grade).

BOILING: A.—Talk about cooking, to discover what it is, how it affects food-materials, and what is needful for cooking; heat, natural and artificial; fuel, wood, charcoal, coal, gas; give directions for making a fire and make one.

Teach boiling by means of experiments: (a) Heat a cup of water, noting the change in temperature from time to time; note simmering and boiling. (b) Compare, by boiling, fresh and salt water with respect to density; experiment with eggs and blocks of wood; discover that it takes longer to boil salt water than it does to boil fresh water. (c) Put a piece of fresh meat into boiling water for a short time; note the result to meat and water; cut the meat and note the result; show the effect to meat and water of cold water on meat (this requires some time); cut the meat and note the result; boil the water. (d) Break an egg into boiling water and another into cold water; note the results; boil the cold water with the egg; draw inferences; hot water hardens albumen; to retain the nutriment in the article boiled put the article into boiling water and boil; to have nutriment mix with the water put the article into cold water and boil. (e) Make beef tea; have the meat prepared for the first class, after which let each class prepare meat for the succeeding one.

Boil meat to prepare the same for food. Boil meat for broth. Make jellied soup stock. Teach which parts of meat (beef, mutton, and lamb) are used for soups. Show economy of making stock. Teach the pupils how to distinguish between fresh and stale meats (appearance, smell, etc.).—Poach eggs.

B.—Experiment with salted and smoked meats: Put salted meat into cold water; then show that the water is salty by tasting it and by testing its density. Whence comes the salt? what it is, where found, how prepared for market.

C.—Experiment with starch and flour: (a) Cut a potato into thin slices and soak it in cold water. Pour off the water; show that starch is a fine powder found in grains and vegetables; show starch cells in potato; microscope. (b) Pour cold water over some starch, mix, and let it stand for a short time; stir again and pour on boiling water; stir and note the result. (c) Pour boiling water over dry starch; stir and note the result. (d) Make like experiments with flour; draw conclusions. (e) Dip a potato into boiling water; note the result. (f) Pour boiling water over oatmeal; note the result; draw conclusion.

Make blancmange. Cornstarch; from what and how obtained, how prepared, substitutes. Make a roux; plain, egg, and caper sauces. Boil rice and potatoes and mash; boil beets, onions, and squash. Give directions for preparing and cooking other vegetables. Make either vegetable soup or celery purée. Boil oatmeal (cracked wheat, cerealine). Boil rice and make rice custard. Boil coffee and cocoa, steep tea. Coffee, cocoa, tea; from what and how obtained; properties and value of each.

D.—Utensils used in boiling. An intelligent study of the materials from which the utensils are made.

STEWING: Experiment with tough meat and vegetable acids, such as lemon-juice and vinegar. Compare tender and tough meat before and after soaking in the acid. Show where in the animal tough pieces of meat are found. Explain why they contain so much nutriment and show their value as food. Make a beef stew. Make an Irish stew without dumplings. Braise a calf's

First Year (Seventh Grade)—Continued.

STEWING—Continued.

heart or smother a piece of beef. Haricot mutton. Stew fruit (apples, prunes, etc.). Make "bubble and squeak." Pepper, butter, substitute, from what and how obtained; use and value in cooking.

BROILING.—Broil a steak (beef or veal): (a) Compare results obtained with those obtained by putting meat into boiling water. (b) Names and positions of best steaks: broil chops, mutton, lamb, or pork: (a) Positions of chops. (b) Lard and oleomargarine; from what and how made; use; value; how to select different kinds of meat by appearance; toast bread; utensils used in broiling.

BAKING.—Experiment with yeast, soda, cream of tartar, sour milk, and baking powder: (a) Mix soda and cream of tartar with cold water; show the presence of carbonic acid gas (lighted taper). (b) Pour water over baking powder; show the presence of gas. (c) Mix soda with sour milk; show the presence of gas and that the milk is sweet. (d) Mix baking powder or soda and cream of tartar with flour; moisten and make a dough; put one-half into a hot oven immediately; allow the other half to remain exposed to the air for a short time, then put it into the oven; note the difference; cause of difference; draw conclusions. (e) Make yeast; talk about the yeast plant or germ; from what and how obtained; proper temperature necessary to the growth; what is caused by the growing? Fermentation; microscope; show presence of carbonic acid gas in yeast; mix yeast with a little flour and note the result.

Make white bread and rolls with potato yeast: (a) Kneading, length of time, motion, etc. (b) Compressed yeast. (c) Flour; from what and how obtained; kinds; properties and value of each; processes; make biscuits (baking powder); make muffins (soda and cream of tartar); make corn-bread (soda and sour milk); make Graham gems.

Roast meat: (a) Compare the appearance of roast meat with boiled meat. (b) Best pieces for roasting. (c) Basting. (d) Solid and rolled roasts. Give, incidentally, the arrangement of oven dampers; kind of fire necessary for baking; and proper temperature of the oven.

Second Year (Eighth Grade).

BOILING: Review facts learned about boiling and obtain a definition. Boil mutton: (a) for the broth, (b) for the meat; make caper sauce. Boil fish; make egg sauce (Note.—Give directions for selecting and cleaning fish). Raising, slaughtering of animals, and packing of meat; means of preserving; principal cities for this industry; markets. Boil corned beef and cabbage; boil cauliflower; make egg sauce; make apple dumplings and sugar sauce; make roly poly pudding and sauce; make soft custard; make salad dressing; make potato salad.

STEWING: Oysters: (a) stewed, (b) scalloped; chowder; make a fricassee of beef or stew beef with carrots; make a white stew and a pot-pie.

BROILING: Broil a shad, a herring, or any other fresh fish. Broil a salted mackerel or any other salted fish. Broil a smoked fish. Broil a slice of ham. Broil oysters.

BAKING.—Review facts learned about carbonic acid gas, fermentation, and heat for baking; make white bread, Graham bread, and brown bread; stuff and bake a fish.

Make cake: (a) Cookies: Spices; from where and how obtained; their properties and use in cooking. (b) Ginger snaps. (c) Dover cake (Note.—Citron; from what and how made). (d) Sponge cake. (e) Jelly cake.

*Second Year (Eighth Grade)—Continued.***BAKING—Continued.**

Make pies: (a) Pie paste, (b) Apple pie (peach, rhubarb, etc.), (c) Lemon pie (custard, etc.). Make puddings: (a) bread, (b) Cottage pudding, (c) Sago, rice, or tapioca; Sago, tapioca, rice; from what and how obtained; how prepared for market; bake apples and potatoes.

Frying.—Experiment with fat: (a) Show that pure fat will not boil. (b) Show that fat containing water boils. (c) Show the proper temperature of fat for cooking by putting pieces of dough or a little of beaten egg into it at different times (before it is hot enough, when hot enough, and when burning); note the difference and draw conclusions. Show the economy in the use of eggs in kettle-fry-

*Second Year (Eighth Grade)—Continued.***Frying—Continued.**

ing; scramble eggs; make an omelet; make griddle cakes; make fritters. (a) Batter. (b) Salsify, parsnip, corn, etc. (c) Apple, oyster, clam, etc.; make doughnuts (raised by yeast); make crullers (raised by baking powder).

Third Year (High School).

(The third year's course in cooking has not been fully developed, as it will not be needed this year, but when developed it will include the preparation of more difficult dishes than those before given; the preparation of fancy dishes; the preparation of dishes for invalids; and the preserving of meats, vegetables, and fruits.)

MANUAL TRAINING COURSE OF STUDY FOR NEW YORK CITY.

This is not the place to discuss the great changes that are being made in the growth called the public school curriculum. In Boston the attack is upon arithmetic alone, we believe, but in New York it is somewhat in the nature of a thorough renovation.

So desirable is it to show the proportion of the programme that manual training occupies, "the co-ordination with the other studies of the system," as we ventured to call our meagre information on the subject in our last report, that we give the course of the New York schools in which manual training has been introduced, in full. We regret that we can only give the manual training course of the Paris schools to compare with the full course of the schools of our metropolis.

As a book of travels is much more understandable when illustrated, so have we illustrated each of the subjects of a manual training course by a curriculum particularly adapted for the purpose; now the view will be panoramic.

PRIMARY SCHOOLS.**SIXTH GRADE.**

1. *Language Lessons.*—Reading—familiar words, phrases, and simple sentences (from blackboard, charts, etc.); spelling—familiar words from dictation; lessons on the obvious parts and common uses of familiar objects; also on common colors.
2. *Form and Drawing.*—Form—sphere, cube, square, oblong; position of straight lines—vertical, horizontal, oblique; angles—right, acute, obtuse; surface, face, edge. Drawing—straight lines—vertical, horizontal, oblique; letters composed of straight lines; angles—right, acute, obtuse; representing (with straight lines) positions of strings, sticks, and edges; square and oblong faces of solids; squares and oblongs, from stick-laying.
3. *Writing.*—Short words (from copies on blackboard or chart).
4. *Number.*—Counting—by ones to 100, by twos and threes to 30; also counting backward by ones from 10; Adding—by ones, twos, and threes mingled to 20; numbers—to be read to 100 and written to 30.
5. *Vocal Music.*—Simple exercises in singing to train the pupils in the use of musical sounds

FIFTH GRADE.

1. *Language Lessons.*—Reading—from the blackboards, charts, and a First Reader; the meaning of phrases and selected words to be associated with their use in the sentences read. Spelling—words selected from the reading lessons; also other familiar words. Lessons on the obvious parts and uses of familiar objects, and on common colors continued.
2. *Form and Drawing.*—Form—cylinder, square, prism, hemisphere, circle, semicircle, triangle, curved surface, curved face, curved edge, curved line; measured lengths (inches). Drawing—angles—right, acute, obtuse; triangles; square and oblong faces of solids; curved and straight lines combined; circles and semicircles by free-hand movement; divide lines into equal parts; draw inch lengths.
3. *Writing.*—Short words (from copy).

FIFTH GRADE—Continued.

4. *Number.*—Counting by 3's, 4's, and 5's to 50. Adding by 2's, 3's, 4's, and 5's to 30 (on the blackboard and the slate). Subtracting by splints, etc., from numbers below 20. Multiplying two by the numbers below six. Numbers to be read at sight from the blackboard, and to be written through three places. Roman numbers through XII, also their use on the clock face.
5. *Vocal Music.*—Continued as in the sixth grade with two or three simple songs, and the scale by rote. Represent steps of scale and give simple ideas of time.

FOURTH GRADE.

1. *Language Lessons.*—Reading—through a First Reader, or in an easy Second Reader. The meaning of phrases and selected words from the sentences which have been read. Spelling—words selected from the reading lessons, and other familiar words. Lessons on familiar objects continued, with obvious qualities added, also on color.
2. *Form and Drawing.*—Form—triangular prism, rhomb, rhomboid, right, acute, and obtuse angled triangles; faces—plane, curved; circle—circumference, diameter; square—diameter, diagonal. Drawing—square, rhomb, oblong, rhomboid; three kinds of triangles; squares drawn in group to represent surface of a cube; oblongs and squares in group, to represent surface of a square prism; circle with diameter; squares with diameters and diagonals; parallel lines; front and end of square and of oblong boxes; groups of circles.
3. *Writing.*—Short sentences (from copy).
4. *Arithmetic.*—Numeration and notation—through six places. Adding single columns of seven figures, including 6, 7, 8, and 9, also orally by 6's, 7's, 8's, 9's, and 10's. Subtracting 3's, 4's, 5's, and 6's from numbers below 20. Multiplying two by numbers below 11. Simple practical questions. Roman numbers to include L.
5. *Vocal Music.*—Instruction as in fifth grade continued, with additional songs by rote.

THIRD GRADE.

1. *Language Lessons*.—Reading—in a Second Reader; the meaning of phrases and selected words which have been read. Spelling—words selected from reading lessons, and other familiar words (orally and in writing); lessons on familiar objects continued.
2. *Form and Drawing*.—Form—cone—base, vertex; pyramid—square, triangular; equilateral triangle; squares on diameters, on diagonals; concentric squares. Drawing—cylinder, cone, oblong, triangle with two equal sides; faces of a solid, in group; circles—diameters; parallel lines; squares on diameters and on diagonals—add curved lines symmetrically arranged; two adjacent faces of a solid; common objects—window, door; groups of tablets.
3. *Writing*—sentences continued. Short words without capitals.
4. *Sewing*.—Threading of needle; use of thimble; overhanding.
5. *Arithmetic*.—Addition—three columns of ten figures (including examples with concrete numbers); simple, practical questions in addition and subtraction (to be worked without slate and pencil); multiplication table—through 6 times 12; Roman numbers to include D.
6. *Vocal Music*.—Instruction continued, with the use of staff, clef, notes of different length, time, etc.

SECOND GRADE.

1. *Language Lessons*.—Reading—through the Second Reader; the meaning of phrases and selected words which have been read. Spelling—as in the previous grade; lessons on familiar objects continued.
2. *Form and Drawing*.—Form—ellipsoid, ovoid, vase; ellipse, oval; quadrant, radius, arc; octagon, hexagon, pentagon. Drawing—ellipse, oval; vase form, reversed curve; quadrant, radius, arc; octagon, hexagon, pentagon; crosses—Latin, Greek, Maltese, St. Andrew's; circles on half diameters and half diagonals of squares; objects—pitcher, teapot, etc.; ornamental group of tablets.
3. *Writing*.—Sentences continued with all the capitals.
4. *Sewing*.—Hemming; seam-sewing; overcasting.

EIGHT GRADE.

1. *Language Lessons*.—Reading, of the grade of a Third Reader; oral lessons on the qualities and uses of familiar objects, such as articles of clothing, food, material for building, etc.; compositions; spelling, meaning, and use of words, chiefly from the lessons of the reading-book and from the oral lessons of the grade; also selected miscellaneous words in general use, at least 100 in number, to be taught chiefly by writing them separately, and in short sentences from dictation.
2. *Geography*.—The world, from globes and outline maps.
3. *Arithmetic*.—Through the simple rules and Federal money with practical examples; selected tables of weights and measures, with simple, practical applications.
4. *Penmanship*.—Words with capitals.
5. *Form and Drawing*.—Drawing—(free-hand)—semicircles; arrangement of simple and compound curves; simple historic borders; symmetrical arrangements of cordate leaves; simple objects from nature; maps. (Mechanical)—use of instruments; application of simple practical problems of geometry; patterns formed from intersecting parallel lines; surface patterns, hexagonal and octagonal; parallel lines as used for shading. Cutting and modelling from drawn work.
6. *Sewing*.—Review hems and bias fells, French seams; gathering.

SECOND GRADE—Continued.

5. *Arithmetic*.—Addition, subtraction, and multiplication (multipliers not to exceed 12), with practical examples; multiplication table completed; Roman numbers to number of the year. Tables—Federal money, time, liquid measure, and dry measure.
6. *Vocal Music*.—Instruction continued as in previous grade; singing notes in groups, pupils to beat time.

FIRST GRADE.

1. *Language Lessons*.—Reading—of the grade of an easy Third Reader; meaning of phrases and selected words which have been read. Spelling—as in previous grade. Lessons on objects as in the previous grades, with more complete descriptions.
2. *Geography*. Without text-books—points of compass; location and direction of familiar places; elementary terms; shape of earth and situation of principal bodies of land and water, on globe and on map.
3. *Form and Drawing*.—Form—construction of forms of regular solids by drawing, cutting, folding, and pasting paper, etc.; construction in clay from drawings—steps of stairs, slate frame, concentric squares, etc.; representation of islands, etc., with clay. Drawing—circular faces, seen directly and obliquely; objects—oil-can, ash-can, tea canister, street lamp, kite, etc.; tablets arranged as borders and other ornaments. Draw, as maps, the clay representation of islands, etc.
4. *Writing*.—Brief designs of familiar objects; words with capitals; during the latter half of this grade one lesson each week to be written from dictation.
5. *Sewing*.—Seams—back stitching and stitching; plain fells; bias fells.
6. *Arithmetic*.—Numeration and notation—through nine places; addition and subtraction continued; multiplication—multiplicand not exceeding 6 figures, multiplier not exceeding 4 figures. Division—divisor not exceeding 12; practical examples in the several rules. Tables—long measure, avoirdupois weight and miscellaneous table, with review of previous grade; simple, practical questions.
7. *Vocal Music*.—Instruction continued as in the second grade; teach the singing of simple tunes in the natural scale by numerals, syllables, letters, la la la, and by appropriate words.

GRAMMAR SCHOOLS.

SEVENTH GRADE.

1. *Language Lessons*.—Reading, of the grade of a Third Reader (a different book from that used in the eighth grade); oral lessons on animals; compositions; spelling, meaning, and use of words as before—at least 100 additional words and a review of those previously taught.
2. *Geography*.—Western Hemisphere in outline, together with review of preceding grade—without text-book.
3. *Arithmetic*.—Through subtraction of common fractions, with practical examples; selected tables of weights and measures, as before.
4. *Penmanship*.—Words and phrases.
5. *Form and Drawing*.—Drawing—(free hand)—circles; borders, two different units to be used in each; symmetrical arrangement of hastate leaves; simple objects, from nature; maps. (Mechanical)—applications of simple practical problems of geometry; straight lines, "dotted," etc., door with pannels, and window with panes, from measurements made in class; running patterns from circles and arcs; trefoil in triangle. Cutting and modelling—from drawn work.
6. *Sewing*.—Button holes; sewing on buttons; patching.

SIXTH GRADE.

1. *Language Lessons*.—Reading, of the grade of an easy Fourth Reader; oral lessons on plants; compositions; spelling, meaning, and use of words as before—at least 100 additional words and review of all previously taught; easy exercises in suffixes.

SIXTH GRADE—Continued.

2. *Geography*.—Eastern Hemisphere in outline, together with review of preceding grade—without text-book.
3. *Arithmetic*.—Common fractions completed, with practical examples; selected tables of weights and measures, as before.
4. *Penmanship*.—Phrases and sentences.
5. *Form and Drawing*.—Drawing—(free-hand)—ellipses; ovals; vases; original designs with leaf and flower; simple objects, from nature; maps. (Mechanical)—applications of simple, practical problems of geometry; tables, etc., from measurements made in the class; arches, by arcs of circles; quatrefoil in circle; designs (ornate), circle and contents; window, pointed arch. Cutting and modelling—from drawn work.
6. *Sewing*.—Herringbone stitch, and flannel patching; darning stockings; darning tears and cuts.

FIFTH GRADE.

1. *Language Lessons*.—Reading, of the grade of a Fourth Reader; oral lessons on the human body; composition; spelling, meaning and use of words as before—at least 100 additional words, and review of all previously taught; exercises in prefixes and suffixes.
2. *History of the United States*.—A brief general outline—without text-book.
3. *Geography*.—Western Hemisphere in detail, with special attention to United States, together with review of preceding grade.
4. *Arithmetic*.—Decimals, with practical examples in common and decimal fractions; reduction, ascending, and descending, of integral denominate numbers.
5. *Penmanship*.—Phrases and sentences.
6. *Form and Drawing*.—Drawing—(free hand)—regular pentagon; Greek vase, with perspective effect; Egyptian and Greek borders; flowers and trilobate leaves in original designs; maps; elevations, plans, and other views of cubes, prisms, cylinders, and cones. (Mechanical)—simple graphic solutions of selected geometrical theorems; elevations, etc., already drawn free-hand; drawing required for shop work. Modelling—Relief maps. Shop-work—use of tools—knife, and jack plane; making joints—butt, butt-mitre, lap, etc.
7. *Sewing*.—Review all previous work; tucking, gussets.

FOURTH GRADE.

1. *Language Lessons*.—Reading, of the grade of a Fourth Reader (a different book from that of the fifth and sixth grades), and in supplementary reader upon the subjects of the oral lessons of this or previous grades; oral lessons on common minerals and metals; composition; spelling, meaning, and use of words, as before—at least one hundred additional words, and review of all previously taught; exercises in prefixes and suffixes continued. English grammar (without text-book)—the construction of sentences, with a view to develop a knowledge of the parts of speech, and to illustrate the terms "subject," "predicate," and "object."
2. *History of United States*.—Outline with greater detail—without text-book.
3. *Geography*.—Eastern Hemisphere in detail, with special attention to Europe, together with review of preceding grade.
4. *Arithmetic*.—Denominate numbers completed, with practical examples.
5. *Penmanship*.—Practice in large and small writing.
6. *Form and Drawing*.—Drawing—(free-hand)—the spiral; flowers and lobed leaves in original designs; mediæval and moresque ornaments; ornamented vases; maps; working sketches of tools and of joints; sections of solids. (Mechanical)—simple graphic solutions of selected geometrical theorems continued; working drawings for shop work. Modelling—relief maps. Shop work—use of tools—add crosscut saw, hammer and nails, and chisel; making joints, etc.
7. *Sewing*.—Measuring, cutting, paper patterns, and fitting.

THIRD GRADE.

1. *Language Lessons*.—Reading, in supplementary reader upon subjects of the oral lessons in this or previous grades; oral lessons on the simple facts of natural philosophy; composition; spelling, meaning and use of words as before; exercises in the formation of derivative words; English grammar (without text-book) continued.
2. *History of the United States*.—Through the Revolutionary War—class reading in text-book and in historical supplementary reader. No home lessons to be given.
3. *Geography*.—General review, with special attention to the United States and Europe. Supplementary readings in geography.
4. *Arithmetic*.—Percentage, its applications to ordinary business transactions which do not involve the consideration of time.
5. *Penmanship*.—Practice in difference styles; letter-writing.
6. *Form and Drawing*.—Drawing—(free-hand)—historic vase, decorated; original pottery form, decorated; historic ornaments; original surface covering, not less than two different units to be used; original circular border; maps; working sketches for shop work. (Mechanical)—simple graphic solutions of selected geometrical theorems, continued; working drawings for shop work. Modelling—relief maps; simple forms for carving. Shop work—use of tools—add gouge, rip-saw, center-bit, and hand-screws; cutting mouldings, etc.; making joints—lap, scarf, and mitre.
7. *Cooking*.—Materials of the human body; tissues—waste of, repair of. Digestibility—cooking solid materials to prepare them for digestion. Nutritiveness—nutritive values of foods; palatability. Food elements—groups of—mineral; starch and sugar; fats; albuminoids. Related facts—physical and chemical; kinds of fuel; effects of heat on water—boiling points; temperatures of flames; physical effects of heat on albumen; on starch; on gluten, etc.; proper temperatures for various purposes; chemical effects of overheating; principle and action of yeast powders, of leaven, of yeast; important function of the sugar in flour. Utensils—their selection, use, and preservation. Purchasing food—discrimination as to wholesome and unwholesome; choice of parts. The "germ theory"—applied to foods. Practical exercises in cooking, involving simple applications of facts and principles taught.

SECOND GRADE.

1. *Language Lessons*.—Reading—supplementary reading as before; oral lessons on the simple facts relating to air, water, light, heat, and sound; compositions, spelling, and meaning of words as before; exercises in the formation of derivative words continued. English grammar—the construction of compound and complex sentences, with the view of teaching propriety of expression.
2. *History of the United States*.—Completed, with very brief outline of the Federal, State, and municipal government. Instruction as in third grade.
3. *Arithmetic*.—Interest and discount; simple proportion.
4. *Penmanship*.—Paragraphs; business forms, such as bills, receipts, drafts, etc.; letter-writing continued.
5. *Form and Drawing*.—Drawing—(free-hand)—original designs for industrial purposes; from the model—cube, square prism, square pyramid, cylinder and cone; working sketches for shop work. (Mechanical)—working drawings for shop work. Modelling—simple forms for carving. Shop work—joints—dovetail, mortise.
6. *Cooking*.—As in third grade.

FIRST GRADE.

1. *Language Lessons*.—Reading, as before, together with poetry and fiction; compositions; spelling, meaning and use of words, as before; a review of the previous grades in the formation of words. English grammar continued.

FIRST GRADE—Continued.

2. *Arithmetic*.—A review of the business arithmetic of the preceding grades; also exchange, equation of payments, averaging of accounts, custom house business, partnership, and mensuration.
3. *Penmanship*.—Paragraphs, business forms, and letter-writing, continued.
4. *Plain Geometry*.—Fundamental theorems and problems.

FIRST GRADE—Continued.

5. *Form and Drawing*.—Drawing—(free-hand)—original designs for industrial purposes; historic ornaments; from the model—prisms, hexagonal and octagonal; also, groups of solids; working sketches for shop work. (Mechanical)—working drawings for shop work. Shop work—dovetailed box, from measurements and drawings.

COURSE OF THE PARIS PUBLIC SCHOOLS.¹

Some 555 public elementary schools in Paris educate over 120,000 children between the ages of six and twelve, at an annual cost of \$2,700,000. Below these are the kindergartens, 126 in all, attended by 30,000 children from six down to two years of age, at an annual cost of \$410,000. Above the elementary schools are the higher elementary schools, 7 in all, approximating our high schools as to grade, attended by 4,000 pupils over twelve and under fifteen when admitted, costing \$700,000 annually. Six hundred and ninety-two schools, attended by 155,000 pupils, costing annually \$3,810,000, exclusive of the cost of new buildings and repairs, about a million more. In 1830, two years before M. Guizot began the foundation of the public school system of France, the appropriation was not quite \$25,000. Ten per cent. of the city's expenditure, \$60,000,000, is for education, but this includes other schools than those given above.

The kindergartens, says Mr. Schoenhof, are more than a benefit to the working class—they are a blessing. The attendance averages from 150 to 200 for each school. In winter the hours are from 8 a. m. to 6 p. m., in summer from 7 until 7. At 11 o'clock the children get soup and eat whatever they may have brought with them. The manual exercises consist of plaiting, twining, folding, and knitting. Sewing would be fatiguing. Instruction is given in a way to create the impression that it is play. Thus from the very foundation the effort is begun "to educate the mind through the senses, and to lead the pupil well prepared into the great open field of industrial life, where the battle of life is fought."

In the elementary schools it is held (Mr. Schoenhof was in oral communication with the authorities) that physical education, manual labor practice, conduces better to the development of the mind than one-sided theoretical instruction. The former is introduced in support of the latter, and experience of some years has demonstrated to the satisfaction of competent observers the wisdom of combining manual labor exercises with theoretic instruction in primary schools.

In 90 of the 235 elementary schools for boys there are workshops for iron and wood work, under a superintendent. The lower classes make paper objects, card-board boxes covered with colored paper, and the like. Some schools have as yet only this instruction. The workmen instructors superintending the manual training classes receive about 30 cents an hour. A model school is that designated as "Primary [elementary] School 109, avenue Parmentier." It has a wood and an iron shop, the wood shop being the largest. There are in it twelve carpenter benches, in two rows in the middle of the room—each bench accommodating two boys—and four lathes against the wall. One boy turns for a quarter of an hour, two others observing him; then one of the observers exchanges place with him, and so on; there being three times as many boys as lathes as yet. At the bench the pupils are taught joining, dovetailing, etc.; at the lathe they commence on a plain stick of a certain length, "which is turned into 76 different ornamental pieces, made either to stand separately or to fit into others, and by combining produce a finished object." If they make ten pieces satisfactorily they are permitted to make something for themselves and take it to their home. The workshop for iron contains twelve vises, arranged along the walls, a boring machine, anvil, and forge. Starting with a plain piece it is worked into simple geometrical shapes and other forms by the file. Lead is used for forging and hammering, as it requires less strength to work than iron.

For the girls sewing has been introduced and, in the upper classes, household work. In the sewing classes the pupils bring their own materials. One and a quarter hours are devoted to the subject during the week in the lower classes, and a half hour more in the middle classes.

The French have what would be called in English, if the term were translated word for word, superior primary schools, but as the word primary in this connection covers what we mean by elementary, superior elementary schools are about equivalent to our high schools without the classical features; in brief, they have a literary course similar to

¹ The matter here given in abstract is based upon a report by Mr. Schoenhof, U. S. consul at Tunstall, England, to the Secretary of State, entitled "Industrial Education in France," published within the year.

that of our manual training schools as described in Table 77, and the remarks thereon. The term of instruction covers four years. The directors and professors are appointed by the minister of public instruction, who can establish the schools on the request of a superintendent of education of a department, acting at the motion of the civil authority of the department, or on the demand of the "committee of patronage." The instruction is gratuitous and, wherever practicable, pupils are boarded at their own expense. Scholarships of various kinds seem to be provided in considerable number. The shop practice, upon which the law lays great stress, is in wood and iron work. In the wood-working department sawing, boring, planing, and joinery are taught, and the qualities and usages of different woods and the principal tools explained. In the iron shop the work consists of filing, hammering, forging, soldering, graving, boring, turning, and fitting, and the instruction in explaining the properties, varieties, and uses of iron and the manner of using the different tools in working it. Rough sketches and working drawings are made of all objects to be executed by the pupil; in the higher classes the drawing resembles in some degree that given in industrial art schools.

Mr. Schoenhof says "there are now in Paris under the title *Écoles primaires supérieures* and subject to the municipal school system of Paris" seven schools, one of which, in the Rue de Jouy, is for girls. But as he has not described this school under the caption *Écoles primaires supérieures pour filles*, and states that the general course of instruction of those given under that head "is such as is required for higher employments—book-keepers and correspondents—for the industrial classes, to make the girls practical and intelligent workwomen, as well as to fit them to take charge of the industrial establishments of woman's employment," they may be viewed as practically trade schools.

The following is the programme worked out by the French school authorities for workshop practice in their so-called primary schools.

It is expected that this workshop practice will soon be extended to cover all the elementary schools of Paris—handwork, like that described above, in the boys' schools, and work serviceable for girls' occupations in after life in the girls' schools.

ELEMENTARY CLASS.

[Seven and eight years old. One hour per day.]

Elementary exercises in free-hand drawing, symmetrical arrangement of forms, cutting out pieces of colored paper and applying them upon geometrical forms, exercises in coloring, cutting out geometrical forms in cardboard, representations of geometrical solids. All these exercises to be done first on squared and subsequently on plain paper.

Small basket work. Arrangement of strips of colored paper: (1) In interwoven forms. (2) In plaited patterns.

Modelling: Reproductions of geometrical solids and simple objects.

INTERMEDIATE CLASS.

[Nine and ten years old. One hour per day.]

Cutting out cardboard patterns, construction of regular geometric solids, construction by the pupils of cardboard models, covered with colored drawings or colored paper.

Small basket work; combination of plaits; basket making.

Objects made of wire; trellis or netting; wire chain making.

Combination of iron and wood. Cages.

Modelling simple architectural ornaments.

Object lessons: Principal characteristics of wood and the common metals.

UPPER CLASS.

[Eleven and twelve years old. Two hours per day.]

Drawing and modelling; continuation of the exercises in the preceding class; repetition of the ornaments, previously executed, in the form of sketches, with dimensions attached to them; drawing the requisite sections for this purpose; reproducing the sections as measured sketches; study of the various tools used in working wood—hammer, mallet, chisel, gimlet, centre-bit, brace, screwdriver, compasses, square, marking-gauge, saws of different kinds, jack plane, trying plane, smoothing plane, files and rasps, level.

Theoretical and practical lessons in the above. Planing and sawing wood; construction of simple joints.

Boxes nailed together, or jointed without tacks. Wood lathe; tools used in turning; turning simple geometrical forms.

Study of the tools used in working iron—hammer, chisel, cutting tool, cold chisel, squares, compass, files, etc.

Theoretical and practical lessons concerning them.

Exercises in filing, smoothing, and finishing rough forgings or castings (cubes, polygonal nuts).

The practical work in the shops in primary schools is to be followed by gymnastic exercises, in accordance with a specialised programme.

PUBLIC MANUAL TRAINING (RUSSIAN SYSTEM) SCHOOLS.

These schools are treated of along with other schools of the class to which an entire section has been devoted. There are too few of them to attempt any division into public and private, and it has been deemed expedient to group them in one table, which is facile, inasmuch as they are based, with an exception, upon the Russian system.

While referring the reader to this section it is deemed proper to give a brief account of the origin and scope of the class, and in doing so, and for those not having the Bureau's report for 1886-87, the statement made in that report will be used:

"A decade has passed since Professor Runkle became acquainted with the system of instruction pursued at the Imperial Technical of Moscow, saw its utility, and advocated and secured its introduction into the Massachusetts Institute of Technology. Of the

several manual training schools or departments established since that important event, it will here suffice to mention three, which claim particular attention by reason of the sources from which they sprang.

"The St. Louis Manual Training School, though a department of the Washington University, owes its establishment in 1879¹ to the liberality and wisdom of several gentlemen of St. Louis, by whom the buildings were erected and the school endowed. To define the scope of this school and give its programme of manual studies is to give those of the other two of which it seems to have been the prototype. "Its object," says the second article of the ordinance given by the Washington University, "shall be instruction in mathematics, drawing, and the English branches of a high-school course, and instruction and practice in the use of tools. The tool instruction, as at present contemplated, shall include carpentry, wood-turning, pattern-making, iron chipping and filing, forge work, brazing and soldering, the use of machine tools, and such other instruction of a similar character as may be deemed advisable to add to the foregoing from time to time." In all the schools the course is of three years. At St. Louis and Chicago the first year is spent at wood-working, the second at the forge, and the third at the metal-working bench and lathe, and in the study of machinery. The sequence at the Baltimore school is somewhat different, forging coming the first, and pattern-making and vise-work in the second year. Mathematics through trigonometry, English language, literature, and history, and elementary science are relied on for mental training, and free-hand and mechanical drawing is the intermediary that brings the mental and manual work into relation. In all the schools the day is about equally divided between the two concurrent systems of development.

"The history of the Chicago Manual Training School began at a meeting of the Commercial Club of that city in 1882, during which funds were subscribed and a committee appointed. On April 19, 1883, the Chicago Manual Training Association was incorporated and the control of the school vested in a board of 9 trustees appointed by it. The school was opened in February, 1884, on completion of its building.

"But perhaps the most interesting example of the establishment of an institution of this class is the organization of the Baltimore Manual Training School as a part of the public school system of the city. On the 24th of April, 1883, in response to a motion, a committee was appointed by the school commissioners to report upon the best means of fitting boys and girls "as quickly as possible for self-support." On June 19, 1883, the committee reported that it would be expedient to establish a high school for manual education under the supervision of the board, since "a knowledge of some form of industrial labor is as necessary as a knowledge of books; and as the State and city acknowledge their obligations to teach children to read and write they cannot deny their obligation to teach them to work, as the latter is as essential for the public welfare as the former. Only a small portion of those who receive their education in the public schools ever enter the professions, but the large number become artisans and adopt mechanical occupations for their future support." On petition, the city council empowered the school commissioners to establish the school, and legislative action was taken in January, 1884. In March of the same year the school was opened."

III.—STATISTICS.

A—As A PUBLIC SCHOOL STUDY IN 1888.

Having placed before the reader in the preceding sections the theory upon which manual training is based and the means that it uses to accomplish its aims, it is now in order to treat of the condition of the subject for the year covered by this report. This section is that which will appear annually. Its methods are simple. In the first place, the statistics which it contains are obtained from inquiries sent to schools and system of schools known or supposed to have introduced manual training. In the second place, its text, with the exception of the remarks on the tables, is obtained as a rule from or based upon the discussions of the subject by educational authorities either at home or abroad. The Office cannot too much thank its correspondents for the care with which its inquiries have been answered and the intelligence exercised in filling its statistical forms.

¹ After the above was written, in 1887, information came ("The Manual Training School," by C. M. Woodward, p. 5) that "exercises for the sole purpose of tool instruction" had been introduced into the Polytechnic School of Washington University, of St. Louis, about 1874; that this school in 1877 had outgrown the single shop, and an old dwelling house was secured, the chambers being used for a carpenter shop, the parlors for a machine shop, and the basement for a forging shop. The shops were used for three years, with no essential change of plan.

Matters of this kind must, of course, be left to the historian of a movement. His is the province of exhaustive treatment which entails exhaustive research. It is needless to say that in this chapter neither has been attempted.

INTRODUCTION INTO THE SCHOOLS OF NEW YORK.

The principal event of the year, one is almost tempted to say the most important event in the history of manual training, is its introduction into the public schools of New York City. This action was in pursuance of the report of the committee on manual training, noticed in the foregoing sections and in the report that precedes this. The committee arrived at seven conclusions and delivered itself of nine resolutions.

The conclusions are:

1. That the introduction of manual training would be an improvement to the present course of study.

2. That manual training is admissible into the schools only as a means of general and not of special education. "The industries of this metropolis are too diverse, the sentiment of equality is too strong, the ambition to rise is too general to allow of any scheme that would designate certain pupils for particular walks of life. Rather must we seek, if we use new methods, to get by means of them better results of a general nature, better trained and disciplined minds, and greater aptitudes and powers for living and doing in whatever may be the pupils future career.

3. That, notwithstanding misdirected efforts in the past, there are certain manual operations which time and experience have sufficiently tested to demonstrate their usefulness and their availability. These operations have the following characteristics: They are such as to lead the people to acquire correct conceptions of form through the careful and systematic discipline of his sense perceptions, and to require, as a test of the accuracy of these conceptions, their correct manual embodiment in material; and, further, to give a practical knowledge of natural laws and of the qualities of materials. These are: Carpentry work, modelling in clay, construction work, paper and pasteboard work, drawing to a scale, sewing, cooking. These are adapted to the child, are useful, inexpensive, and will only require a moderate increase in the teaching force.

4. The training should be for all.

5. The work should not be interrupted by adopting the "central school-shop" feature. Each school building should have its own shop.

6. That the length of the session should not be increased. "The chief excisions will be made from the studies of geography, history, and arithmetic in all the grades" of the grammar schools in order to give room for the new studies. The introduction of kindergarten work into primary grades of course has been well canvassed.

7. That provision must be made for suspending the introduction of some of the proposed work in certain schools, as the carpentry work and cooking will require a separate room.

The resolutions ask for the introduction of manual training, that kindergarten occupations—splints, wire, paper, and clay work—be introduced into the primary grades; that drawing to a scale be introduced both into the boys' and the girls' grammar school; that the girls be taught sewing from the eighth to fourth grades, inclusive, and cooking in the third and second; that the boys be given work-shop instructions from the fifth to the first grades, inclusive; that the work-shop, cooking, and sewing instruction be taught by special teachers, and over all work of this kind in primary or grammar grades an assistant superintendent be appointed.

The board of education adopted these views, and directed the committee to report a course of study in conformity with its own conclusions, which, when approved by the superintendent, should become the course of study for the school selected for introducing the subject, the committee having the power, with the approval of the superintendent, of modifying it. The board also directed "that on application of any board of trustees to said committee to introduce such course into any school, the said committee may authorize the substitution in such school of the course of study and provisions prepared by them, in place of the usual course of study, and the proper committee shall authorize the expenditure necessary therefor, subject to the rules of the board relating to expenditures; provided that until further action is taken by this board, such course shall not be introduced into more than six male grammar schools and six female grammar schools, and the primary departments and schools connected with them."

In the absence of the report of the city superintendent for 1888 we are compelled either to depend on non-official information regarding the introduction of the study into six schools for boys and six for girls or to let the matter go over until our next report; we take the latter alternative. The statistics appear in the table.

For these twelve schools, however, an appropriation of fifteen thousand dollars was made, which was thought to be much too small.

STATE ACTION.

In accordance with the resolution passed May 19, 1887, the governor of Pennsylvania appointed a commission consisting of five to investigate the subject of "industrial education." A meeting was held in Harrisburg on December 9, 1887, and the following in-

quiries were referred to the several members for report at the meeting at Philadelphia, in January, 1888:

1. To what extent in its several grades and by what methods carried on outside of Pennsylvania?

2. To what extent and by what methods now carried on in the several grades of public schools of Pennsylvania, and the practicability of introducing or extending it in such schools—city and rural?

3. To what extent in its several grades and by what methods now carried on in private institutions in Pennsylvania, with the relation of such work to other forms of education, to public charities, reformatories, to industrial development, and to the general interest of society? The best method of enlarging and extending such work, having in view also the question of its more or less direct connection with public systems and agencies.

4. The best means and methods of establishing and maintaining in its several grades; whether by State action or by local action, or by both combined. How far it can be incorporated into the present public-school system in Pennsylvania; what, if any, changes of law are necessary or desirable to that end?

5. Best methods of training suitable teachers. Changes, if any, required for this purpose in the present system of normal schools; changes, if any, required to enable the normal schools to meet more fully the needs of the present public school system?

6. As to each of the foregoing topics: How far the educational element should be incorporated into such training, as distinguished from its strictly trade, apprentice, or technical element?

On May 19, 1888, the governor of New York approved the act (New Legislation, p. 134) empowering local school authorities to establish "industrial training" departments, and for teaching and illustrating the manual or industrial arts and the underlying principles. The State normal schools are required to include in their courses the principles underlying the manual or industrial arts, and also the practical training in the same.

From New Jersey we have been unable to obtain information.¹

OPINIONS OF CITY SUPERINTENDENTS AND OTHERS ON MANUAL TRAINING.

It is very evident that much diversity of opinion exists on what manual training is good for. An endeavor to collate the opinions on the subject would seem to be a hopeless task. We have endeavored to define manual training as a theory of education by examining arguments of several competent authorities, all issued within the year, but to put the matter completely before the reader and prevent any misunderstanding that may arise from his not knowing our "personal equation," as they say in astronomy, we present a symposium on the subject.

Los Angeles, Cal.—"I am heartily in sympathy with manual training in the common schools," says the superintendent, "so far as it can be done with kindergarten work. Beyond this it is difficult to determine how much or how little should be done. If there be as much need for training in iron, wood, leather, brass, cloth, cooking, etc., as the ardent advocates of manual training would have the country believe, why do not private enterprise and capital engage in the work as they do in law, medical, and commercial schools?"

The principal of the high school, however, advocates the introduction of manual training into that school, and as the training has a distinctive character of its own, and is not adapted to the work of the school-room, he would organize a manual training department somewhat on the plan of the Baltimore and Philadelphia schools.

New Haven, Conn.—"Much has been said and written of late," says the superintendent, "on the wisdom of leavening public education with certain forms of industrial training. As the value of this departure is to be determined by actual experiment rather than by actual argument, it is only necessary here to state what has been attempted the past year." The characteristics of the course are given elsewhere. (See p. 846.)

In concluding his remarks the superintendent observes: "It may be admitted that during one period in the history of schools it was permitted to teach anything but what was immediately useful. That time has passed. * * * These several forms of industrial education may all be considered as valuable in two ways: (1) for mental discipline, and (2) for practical utility. While it might be difficult to justify them for the latter reason, it is the prevalent opinion that they can be defended on educational grounds. That wood-working, sewing, and cooking are of immense practical importance is certainly no argument against their adoption as an integral part of a school training."

¹ Some weeks after this chapter had been written, the report to the New Jersey Council of Education on Manual Training came to hand; but it was too late to use it further than as appears on p. 829, foot-note 2. We will use the matter in our next report.

Washington, D. C.—The following is taken from the last report of Superintendent Powell:

"The school year ending June 30, 1887, was marked by the introduction of manual training into the curriculum of the public schools of the District of Columbia. * * *

"The character, divisions, and scope of the work in manual training as now taught in our schools is set forth under the following heads:

"Drawing.—The subject of drawing gives the initial work for developing manual skill. Through its entire course, from the first grade to the high school inclusive, it is divided into two parts—construction and representation. In the constructive part hand and eye are trained, while at the same time ideas concerning the forms made are developed. The work of representation gives manual training by the drawing of the constructed forms. It does more, it correlates physical and mental processes. A scientifically constructed form induces systematic, scientific methods of thought. The thought logically and accurately expressed by oral and written composition complements, perfects the physical culture secured by the construction and drawing. I mention constructive language here because I believe that as a means of the most complete training, as well as a matter of school economy, the manual and mental processes should cooperate on the same subjects. Each is defective without the other, and without such complementary work the training is one-sided still.

"In the first three grades, modelling in clay, stick-laying, paper-folding, weaving, and various other processes of the Kindergarten system unite hand and mind and eye in constructing and drawing geometric forms, and natural forms based on these. Constructive language is taught in the first grade and follows the entire course. The fourth grade continues the preceding work, notably that of paper folding and cutting, and also modelling in clay. The forms made and drawn are applied to objects of ornament and use. Invention is employed for decorative purposes. Neat and workmanlike processes, involving the use of many tools, such as needle, thimble, scissors, hammer, nails, etc., are here taught. The fifth grade includes work like that of the fourth, with the addition of the construction of working drawings. From these drawings patterns are made, and objects constructed, after which the completed objects are represented by drawings. This addition continues through the remainder of the course.

"The thought of progressive development runs through all construction and representation. Each year introduces more intricate designs, more skilled execution of objects and representation.

"In the high school, complex forms in clay and cardboard are made. Constructional, free-hand, and mechanical drawings have place here, as well as executed designs for wall paper and fabrics. Owing to this one branch of manual training many of the graduates of the high school have become designers, draughtsmen, and architects.

"The points emphasized are the scientific construction of models by all the pupils; representation by drawing these models or other objects, rather than drawing from flat surfaces; the stimulation of the inventive faculty by design work for ornamental and other useful purposes, and the cooperation of the mental and physical powers.

"Sewing.—This work has served a double purpose—the one for which it was designed, that of giving instruction in sewing, and another, that of increasing the interest in other school work. It refreshes and invigorates; it introduces a marked change, which breaks up the off-time dull routine so destructive to the spirit of real intelligent work.

"Cooking.—Each cooking school has for its use a kitchen and a mixing room, complete in their appointments. Each is also supplied with blackboards for the representation of many of the food substances which, without such an aid, would be less thoroughly understood. Instruction is given on food materials—their nature, sources, effects on both body and mind, and consequent relative values. Much of the work makes application of the physics regularly taught in the schools. This, with the thorough study of food materials, the experiments, observations, and inferences made by the pupils, gives the work in cooking a scientific and at the same time a practical basis. (The course in cooking is given p. 852.)

"Shopwork.—The work in shops did not, in the year of its introduction, follow the prescribed course, owing to limited facilities in the way of work rooms and tools; however, the plan followed was in harmony with this course. When facilities and time for practice were lacking a general idea of methods was developed. To give breadth and scholastic power to this work instruction was given in the qualities and appearances of different woods under various conditions, the sources of supply, the uses and commercial values; the nature of iron, the location and importance of iron fields, the processes necessary to fit it for use, and the uses; the manufacture and uses of steel, with sufficient historical study of these subjects to show the influence of their use upon the material development of the country.

"The aim is to make this work practical in all its bearings. It includes the correct use of tools, the laying out of work with the aid of knife, pencil, and try square, and

the making of chamfered blocks, moulding, and various T joints. Simple special pieces are made, such as tool racks, shelves, and squares for school-room use. Towel racks and steps for the cooking schools are successfully undertaken. Originality is drawn out by the designing and by making objects which are constructed from original working drawings. The eighth grade shows more difficult constructions than the seventh.

"In the high school many articles of furniture are made for the laboratories, the cooking schools, and the other schools.

"After learning the care and management of the fire and the shifting of belts, forging is introduced by heating and drawing to a point a square rod of iron. This shows the value of care and attention in the performance of the simplest tasks. More difficult work in iron follows, which is succeeded by work in steel, including drawing and the making of punches and chisels, which are tempered and hardened by the pupils themselves. Each pupil is required to continue his efforts until he has made a chisel which will cut iron and steel without injury to itself.

"In the department of wood turning practice is given with chisels, gouges, calipers, and other wood-turning tools. Elementary work in this branch is soon followed by more difficult and useful designs, including drawing models for the schools of the city, standards for physical apparatus, telephone receivers, Indian clubs, etc.

"The practice in moulding includes moulding from a simple flat pattern, from turned patterns, and from those of difficult design. Thus far the work has been limited to two-part flasks and the casting of cylinders, hollow cylinders, wheels both plain and grooved, handles, etc. This training gives the pupils a knowledge of moulding, the difference between cast and wrought metal, and also a knowledge of correct forms for patterns from which he is to mould. As far as practicable it is intended that the pupil shall make a casting from a pattern which he has made from his own drawing.

"In the draughting room the elements of mechanical drawing are taught."

Jacksonville, Fla.—From the report of the agent of the Slater fund for the education of freedmen, we learn that one of the graded schools (for colored) of Jacksonville has had an addition made to it for "industrial instruction." The cost, eight hundred dollars, was borne one-half by the city, and the other by citizens white and colored. Work was begun in November, 1887, with 76 boys and 98 girls from 14 years and upwards. "The work at this school has attracted large attention," says Mr. Haygood, "and strengthened greatly the conviction that industrial training must come into the public school system."

Beardstown, Ill.—Says the superintendent, in a communication to this Office: "We have hardly been at work long enough to speak of results. The boys enjoy the work very much. Accuracy, patience, and a quickening of the observing powers are noticeable results. A few boys who are exceedingly stupid in other work are among the best in drawing and shop work. The work that we are doing meets with almost universal favor among the patrons and citizens. We hope to add lathes for wood working, and sewing for girls."

Galesburg, Ill.—"In considering this question," says the city superintendent, "three principles should direct our line of thought: (1) Education must be adjusted to conform to the conditions of life as these change from age to age; (2) whatever may be the definition of education, its object must ever be to make the child useful to himself and to others; (3) the public schools are for the people, most of whom support themselves by manual labor of some form.

"I do not intend to enter into a discussion of this subject, but I wish to say that nothing will tend so much to bring the child into sympathy with all forms of manual labor and to promote in him a spirit of domestic thrift and a respect for domestic virtues as to teach and exercise him, while growing to manhood, in the elements of industrial knowledge. I believe that not only his own good but that of his country demands such an education. It may be said that this is the duty of the home. So it is, and the same is equally true of much that is now taught in our schools; but the home needs the endorsement and coöperation of the State in this respect as well as in that of giving mental culture."

Moline, Ill.—To our inquiry as to the extension of the manual training course the superintendent replies: "I can say nothing definite under this head. I hope, however, at no distant day to see a department established in connection with the high school where boys and girls may be taught an advanced kind of hand-craft work." The course of this system is given in full p. 843.

Peoria, Ill.—In speaking of the results of the recently introduced instruction in wood working the superintendent of Peoria says that "it is found here, as everywhere else, there are widely different degrees of native aptitude, as well of attention and instruction. It is also found that a clear mind accompanies the skillful hand. The hope of establishing the school is that it will assist in training the mental faculties, that the work done will give mental discipline. So far the interest taken is all that could be wished."

Peru, Ill.—From the superintendent we learn that he finds manual training renders pupils accurate and ready thinkers, causes them to understand the effects of an error, pleases pupils and their parents, enables them to make useful things in school hours, and makes them capable of constructing anything needed about the schools. "Our workshop is run in connection with our public schools. The nature of our community favors it. It does not seem to me as destined to become a part of public school work. It has great value, but a choice of such must be made."

There is no intention of enlarging the work in carpentry and sewing; but wood carving will be done in connection with drawing, the pupils remaining at their desks.

Humboldt, Iowa.—From the superintendent we learn that manual training has been tried now for a year, and it is believed to be a success. "Two classes, of 12 pupils each, composed of boys and girls, worked about an hour a day at carpentry, and succeeded in doing very fair work as well as keeping up with all their other work. The instructor, a skilled mechanic, taught them to square, line, plane, saw, etc. It is a little uncertain, however, whether the work will be continued. The board did not sustain it at the last annual meeting."

From the New England Journal of Education we quote the following particulars in regard to the initiation of this work: "The introduction of a manual training school at Humboldt, Iowa, is announced. It was begun with a fund of fifty dollars, raised by subscription, and by fifty men contributing each ten cents a week for the support of the school for six months, Dr. G. H. Clarke stimulating the work."

Leviston, Me.—From the superintendent we learn that manual training has "not as yet" been engrafted on the school system. "A year ago we had what we called an industrial exhibition, pupils in the grammar schools contributing samples of their work in carpentry, fancy work, etc. The exhibition was a success, and has aroused an interest in manual training."

Portland, Me.—The subject of manual training has several times been urged upon the citizens of Portland, and the superintendent thinks it is time to ask, in view of the success attending the introduction of the subject in other places, whether the city is to remain at a standstill. More than a year ago fifty or sixty persons of wealth and position petitioned the city council to establish a manual training school in connection with the first classes in the grammar school, some of them remarking, "This is an effort to educate in the right direction;" "we wish all our city expenditures were as satisfactory as the teaching our boys the use of the ordinary carpenter's tools would be."

Baltimore, Md.—The school commissioners of the city, in speaking of "industrial education," discuss the report of the principal of their famous manual training school. "The steam engine which was built by the members of the graduating class is now used in the shops in the place of the old engine, and it supplies all the power that is needed to work the machinery. An inspection of the work of the school will show that it is thorough and practical, and that in proportion to the means appropriated for its support, it is accomplishing most excellent results."

"The object of the school is to lay the foundation for industrial employments and at the same time to recognize the value of intellectual culture and discipline, and thus to teach the brain and the hands to work together in performing the practical duties of life. The results of this kind of education must be beneficial to every community by producing more intelligent workmen and more useful citizens."

"If it was more fully appreciated by the friends of public instruction, and officially recognized as an essential part of every school system, it would tend to remove the objections of those who charge that the schools do not properly prepare their pupils for the practical labor of life."

Under the head of "manual training," the city superintendent remarks: "The successful establishment of this school has satisfactorily met the demand for introducing manual training into schools, in which pupils of about fourteen years of age with a good grammar school education are taught, but still there exists among many a demand for the introduction of manual training into the primary and grammar schools. It is generally admitted that the introduction of sewing into the grammar schools in which girls are taught is feasible and desirable, and that its introduction does not decrease the thoroughness of the other work of the schools; but great difference of opinion exists as to what extent manual training should be introduced into the primary and grammar schools. * * *

"Whenever manual work can be performed in a school in such a way as to supplement and aid the acquirement of the literary work, its introduction is unquestionably not only justifiable, but desirable. For this reason it is desirable at this time to introduce into the primary grades the construction of forms in clay for use as models in drawing, and to teach the pupils how to represent them by drawing and to introduce into the grammar schools a continuation of the work, begun in the primary schools, of constructing forms in clay, and teaching the pupils how to represent them properly by

drawing, also the construction of simple apparatus used in physics, and making in sand or clay contour maps showing the physical features of the countries studied by the grade. This work is possible, and when done will not only cultivate to an extent a correct use of the hand and eye, but will greatly aid the work of instruction in drawing, geometry, physics, and geography."

The superintendent would have the authorities "hasten slowly," until by the aid of the work carried on at the Manual Training School and that of the Industrial Education Association, recently established, and of which many teachers are members, a better knowledge of the subject shall have been obtained. He also speaks of the waste of work in arithmetic, grammar, and geography.

Boston, Mass.—The committee on manual training having been petitioned by parents and others to permit children not attending the public schools to attend the manual training schools of carpentry and cooking, the matter was broached at the full meeting of the school board by the chairman of the committee. The committee said if the matter was referred back to them with full powers they would permit such attendance when vacancies existed. This proposition was accepted by the board.

Brookline, Mass.—The last report of this system the Office has is for 1887. A summer vacation school has been provided for by the school committee. "When the new building is finished on Boylston street it is hoped," says the committee, "to make industrial education a more prominent part of our course and utilize one of the rooms in the basement for this department." Cooking had been introduced at the instance of the ladies of the advisory board and under their supervision and at their expense perhaps, for the equipment cost the town nothing. Three classes of six pupils each who should receive one lesson a week for twelve weeks. The plan has been as successful as the means would allow.

Cambridge, Mass.—The manual training experiment has been tried in Cambridge now four years (it is regretted that the superintendent has not furnished this Office full statistics of a work carried on so long). Annually seven classes each from one of seven grammar schools have received elementary instruction in carpentry. In this matter of manual training Mr. Frederick H. Rindge, of the city, has come to the aid of the school authorities and has presented them with a fully equipped "industrial school building;" but under conditions that will only permit the authorities to cooperate in carrying out the intentions of the benevolent donor "so far as the industrial school" is to be brought into connection with the public school system. [Mr. Rindge's school is particularly mentioned under "Trade Schools"].

Chicopee, Mass.—"Should the town," says the superintendent, "build a new high school building, I would advocate the establishing of a department of manual training for boys, in, at least, one industry, say that of light carpentry.

"The association of mental training and the cultivation of manual skill are to-day recognized as most important factors in the education of boys in many of the largest cities of the Union.

"Had we such a training, many boys who now leave school before entering the high school would continue in school through the course, feeling assured that in a great measure they were being fitted for the common duties of life, which must be performed by nearly all of them. Few can enter the professions, become book-keepers or clerks; most must make their subsequent walks in life through the avenues of industry, and must earn bread through some one of the industrial trades; an admirable start towards this most desirable end would be given by a knowledge of the care and use of tools, which would be derived from a manual training course in school."

Hingham, Mass.—The superintendent of Hingham does not think that towns, single handed, can accomplish anything for the advantage of the young in manual training; but thinks in time State central schools will be established.

Holyoke, Mass.—The school committee in their report say: "A well-developed public sentiment in favor of industrial education, which the city government should not fail to recognize, demands that some action be taken in the near future for the establishment of a school for this purpose. Generous offers of individual assistance are understood to have been extended as an inducement towards this end, and there can be no doubt of the usefulness and speedy success of such an undertaking in this city."

Lynn, Mass.—"Last year," says the superintendent, "our school committee considered the expediency of introducing manual training into our city system. The matter was then referred to a special committee, which has recently reported that it is inexpedient to introduce manual training into our city system at present."

Rockland, Mass.—"There seems to be a growing sentiment among the common people in favor of introducing industrial training into the public schools," says the school committee. "The bent of the public mind to-day is towards something practical. Now, although there is just complaint that a great deal that is useless is being taught in our schools, yet the remedy does not lie in introducing tools, or in making a workshop in the school-room." Two reasons against the introduction of the study are (1)

because there is hardly time now to teach the fundamental principles, as nearly all of the teachers have too much to do and too many classes; and (2) an intelligent and virtuous citizen is of more value to the State than even a skilled workman.

Springfield, Mass.—The appropriation of three thousand dollars for the continuance of manual training and of the purchase of property for a school, shows, says the school committee, the favorable opinion of co-education of hand and brain held in their community. Of such instruction, girls as well as boys should have the benefits, and they recommend that two rooms of the manual training school be set apart for instructions in cooking and domestic economy as usually taught.

Waltham, Mass.—Early in the year 1886 the board appointed a subcommittee to propose a feasible and economical plan of grafting manual training upon the public school system. The plan recommended was elementary in character, and consisted of regular instruction at a bench with simple hand tools. "Inasmuch as this instruction," says the school committee, "is wholly optional with pupils, and on no account will be allowed to interfere with regular and allotted work of any school, there can, we think, be little objection to give it a fair trial." The superintendent has failed to reply to the Bureau's inquiry for statistics.

Watertown, Mass.—An education, says the superintendent, should be a preparation for life. A common school education, in as many ways as possible, should be a preparation for usefulness in life. A true education is at every point in its advance double-sided, in-leading, and out-leading. Language has stamped this second side as the important side; for if in its derivation education is other than out-leading the word is misleading. The world has pronounced the second side the important side. What it wants of a man above all else is productiveness. Froebel says, "It would be a most wholesome arrangement in schools to establish actual working hours similar to the existing study hours, and it will surely come to this." "In fact, Froebel," the superintendent observes, "founded all the manual training schools that are or shall be when he published his occupations for the kindergarten and his plan for a school workshop." The superintendent summarizes the educational worth of "industrial instruction" as (1) awakening and training powers and talents which would otherwise remain dormant and untrained; (2) setting in activity the greatest imaginable number of senses and powers and securing knowledge which no other instruction can secure; (3) giving a foundation for much theoretical instruction and placing the aim of such instruction intelligently before the children; (4) serving as a test for much theoretical instruction; (5) securing knowledge and understanding much more easily and impressively, and consequently more lastingly than ordinary instruction can; and (6) teaching the child to value, observe, investigate, test, compare, and invent.

A complete scheme of industrial instruction for schools under his charge would include for boys and girls alike modelling in clay, drawing, and such other forms of hand-training as are adapted to general school-room practice; for the girls only, sewing and cooking should be added, while for boys wood-working would be sufficient.

The chairman of the school committee thinks it would be wise to try the experiment if it can be made without interfering with other branches.

Winchester, Mass.—"The manual training department," says the superintendent, "received its regular appropriation last March (1888), and, limited to sewing and carpentry, it has given sufficient satisfaction to have its existence continued. My own opinion of the matter is that manual training under some of its elementary forms will be the salt to preserve our system of public schools and prevent us from becoming a nation of ignoramuses in skilled industries."

Worcester, Mass.—The sentiments of Superintendent Marble are well known. His remarks on the subject of manual training have appeared in a publication of this Office that has already been placed in the hands of the inquirer.¹

Bay City, Mich.—"Of all the educational questions which are at present under discussion," says the superintendent, "that of technology easily occupies the first place, and many of our larger cities and several of our smaller ones have already made manual training a part of their educational system. By manual training is not meant the teaching of trades, which is merely mechanical in its processes, but the training of the mind through the practical application of the principles of mechanics. That the mind can be as thoroughly disciplined by this as by any other method of instruction is now generally admitted, and the problem of engrafting it upon our present public school system is being carefully studied. The subject has not yet passed the experimental stage, but, nevertheless, sufficient results have already been obtained, especially in the schools of Boston, New York, Philadelphia, Omaha, and elsewhere, to warrant investigation. * * * Bay City cannot afford to lag in the rear, and I certainly hope that you will give the subject the attention it deserves."

¹ Circular of Information, No. 6, 1888: Proceedings of the Department of Superintendents of the N. E. A. at its meeting in February, 1888.

Detroit, Mich.—On February 23, 1888, the Detroit, Mich., board of education received the following report of the special committee on the manual training school, through Inspector O'Flynn:

"Your committee, to which was referred the subject of the introduction of manual training in our schools, report as follows: The bulk of our children cannot make a living except through handwork. Intellectual training alone is therefore an insufficient preparation for life, so far as they are concerned. Man by nature is a tool user. As much of his superiority comes from his skilled hands as from his brain. Neglect to educate his hand and you deprive him of a large portion of his power. The hand is the peer of the intellect. It executes what the mind conceives. The most brilliant ideas are shorn of their splendor if the hand is without the necessary skill to express them. The hand and the mind should receive equal culture. True education looks after the whole man. Any education short of this is a failure. To make man a harmonious being, such as he was intended to be by his Creator, all his powers must be equally developed. Such development, according to Everett, was found in Washington, of whom he said that he reminded him of a circle, every point in whose circumference is equally distant from the centre. The present system of education is strongly biased in favor of professional and literary pursuits, to which there would be no objection were every man's vocation in life law, medicine, theology, or kindred avocations. But these are not the callings for which the majority are intended. The average man must earn his bread by the sweat of his brow, and must be a producer, in order to obtain support. Manual labor has fallen into disrepute among us, and the result is that the great majority of our young men go into the professions, while we have to go abroad for skilled mechanics. The professions are overstocked, and two-thirds of their members earn very precarious livings. Those who do not seek the professions join the huge army of poorly paid clerks and book-keepers, or become Micawbers, dawdling away life 'waiting for something to turn up.' The condition of our girls is still worse.

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"Your committee, therefore, earnestly recommend the establishment of such a school, which may be termed the Mechanical High School. The literary high school is deemed a necessity by those who believe in purely intellectual culture. * * * In recognition of this claim our present high school has been established and generally supported. The working people of Detroit and the other friends of manual training are entitled to as much consideration as the advocates of purely intellectual culture, although they do not claim it, when they ask for the establishment of the high school for mechanics. The entire plant, when completed, will cost under \$100,000, and the current annual expense will never exceed \$15,000, which is less than the annual cost of either the Bishop or Cass schools. For the first year the current expense will not exceed \$10,000.

"Your committee recommend that at first so much of the building will be erected as will be sufficient for the study and recitation rooms required for the school when completed, and shops for the first year's class. The following year the balance of the building which will be required for shops for the remaining classes can be erected. The cost of the site, building, and equipment for the first year will be \$60,000, distributed as follows: Building, \$23,000; site, \$25,000; the equipment of four work rooms for cooking, sewing, drawing, and carpentry, \$3,000; equipment of study and recitation rooms for four hundred pupils, \$2,400; contingencies, \$6,600. The addition to be made to the building in the second year will cost \$23,000, and the shops required for the second, third, and fourth years can be fitted up for \$1,500 apiece. These figures are reliable, as they have been obtained from the superintendent of the Toledo Training School.

"Your committee therefore recommend that an appropriation of \$60,000 towards the plant and \$10,000 for current expenses be asked for this year. These sums should be cheerfully given for the reason that all the schools actually need this year are a primary school, to take place of the Clay School, and another in the neighborhood of the boulevard. The new Clay School will cost \$25,000, and the other \$5,300. This happy condition of things, as our superintendent states, is owing to the fact that the schools built last year are sufficient to meet the wants of all who desire an education. Last year the amount appropriated for new schools was \$146,511. The two primary schools referred to will not cost over the amounts estimated for them, the total of which is \$30,300. Another such opportunity for starting the training school may not be presented in years. Another argument in favor of it is that a portion of it can be used for the ungraded school for three years, during which the second, third, and fourth classes for the training school will be in process of formation."

The report was referred to the committee on finance without discussion.

Minneapolis, Minn.—Metal-working is to be introduced and all the work now commenced will be developed. The subject of sewing is also agitated, as we learn from the superintendent in a late request for statistics and other information on that subject.

Concord, N. H.—The manual training school was organized by the school board acting for the Union School district. Boys of 14 were allowed to attend, on condition that they would maintain their regular school work, in classes of ten. The superintendent says that "the results attained are extremely gratifying and the interest among the pupils is great. Manual training is not compulsory, but all vacancies are quickly filled. No diminution of interest in regular school work is noticed in pupils attending the manual training school. The work is confined to carpentering, but will be enlarged so as to embrace other departments in the near future."

Dover, N. H.—Under the head of "Practical Education," the chairman of the school committee observes: "Occasionally we hear the demand for a practical education, and when we analyze the demand it is found to be a claim that those subjects, and only those, be taught which lead directly to earning a living. When a celebrated artist was asked by what process he mixed his colors, he replied, 'I mix them with my brain, sir,' and he who has the greatest brain power, other things being equal, can secure the best remuneration, whether his efforts be in literature or manual labor. The object of an education is to make a man."

Manchester, N. H.—The chairman of the school committee, under the head of "Practical Education," speaks of the need of developing it as already represented in the evening schools and in the high school. A strong contrast is presented by the day and evening schools. In the latter are those whom circumstances have compelled to learn the lessons of industry and "now need intellectual growth;" in the former this is reversed. "There is an unmistakable demand for something supplementary to the common school to meet this need. Drawing schools, laboratories, manual labor schools, and the like may seem to many of our older citizens like useless innovations, and yet the swiftly changing conditions of our day make them necessities." The vast massing of men in cities has revolutionized all conditions, and though the essential laws of education do not change, "its methods and aims must move on."

The superintendent of the city says that though manual training is offered as the great panacea for prolonging the time the pupils remains in schools, its strongest supporters only advocate its introduction until the higher grades. While he thinks favorably of its introduction in these grades, he fears that it will not influence the primary pupil to continue his school life.

Hoboken, N. J.—In the annual report of the board of education of the city of Hoboken it is said of manual training, "industrial education," as it is there called, "We are confident that this is a part of education which will never be thrown aside or become useless. It will assist families in many ways which cannot now be foreseen. It can be prosecuted quite successfully in the class-room."

Mont Clair, N. J.—"I am convinced," says the superintendent, "that manual training is both intellectually and morally advantageous. Pupils lose nothing, but rather gain in the purely intellectual branches. Self-respect and ambition are frequently first awakened by success in manual work. We shall very soon put in an engine and some turning apparatus."

Newark, N. J.—As the superintendent sees the question, all the confusion and evident contradiction arise from an incorrect and confused conception of what education really is. The best definition of this much-defined term that he has met is, a preparation for complete living. What is manual education? What is its object or province? Can it be made a part of the public school course? A sharp distinction,—he quotes President Gilman, of Johns Hopkins University,—should be drawn between physical, manual, industrial, and technical education, and he thinks "the value of manual training as a means of general education and as a method of intellectual culture, and a means of promoting accurate expression, must be generally acknowledged." "And I think further," he continues, "that it has great value as a preparation for the industrial or professional pursuits, or for advanced technical education, and I am forced to the conclusion that the time is not far in the future when it will take its place side by side with all other educational methods and processes." As to the introduction of manual training into the public schools, that is not a question, but a fact.

Orange, N. J.—"The subject of industrial drawing," remarks the city superintendent, "suggests that of manual training, with which it is closely connected, and of which, indeed, it may be considered a part. While not unanimously endorsed, the balance of opinion among those whose views in educational matters are entitled to weight appears to be decidedly in favor of manual training in public schools. * * * If manual training is introduced in the schools, the subjects taught cannot be added to the curriculum as it stands at present. School hours are already long enough. * * * It must also be strictly borne in mind that the idea is not to make trade schools, but to give such general training of eye and hand and mind as to better prepare the pupil for any business or profession he may follow in after life."

Paterson, N. J.—The superintendent, in replying to the request for statistics, observes: "The results attained in wood-working, etc., in the training shop have been very encouraging. The pupils have been enthusiastic in their interest, and many have exhibited natural skill or mechanical genius which would serve to point a moral, *i. e.*, that such pupils should be allowed to follow the 'bent' with which nature has endowed them rather than to take up professions or employments for which they have no aptitude and in which they would prove to be mediocre." The purpose of the course is to develop thought while training the hand—hand and brain being co-laborers.

The work may be enlarged, but what has already been done is quite elaborate for a beginning. "The problem is how to work the whole in connection with the usual round of studies without undue interference with the essentials of the ordinary course."

Albany, N. Y.—The superintendent says, after quoting the argument of the New York Industrial Association (page 832): "From our brief experience we believe that it is established that manual training is legitimate education work in our schools; that its tendency is to keep boys longer in school; that its effect is to round out the development of the pupil; that it promotes good order and discipline; that it has a moral force, and that it dignifies manual labor by removing false notions of degradation. * * * While in a few places the girls are put in the shops and given the course so successfully with the boys, and while much that is forcible could be said in favor of such a plan, the general practice has been to limit the course for girls to sewing and cooking. It seems to me that if sewing were introduced, it would be best to use it in the grammar schools. To do this systematically and completely two or more special teachers would be needed to give as little as one lesson a week in all the grammar grades. The high school pupils are of an age and from surroundings such that would make instruction in ordinary sewing generally superfluous.

"With my present lights I am not prepared to advise the introduction of any specialized form of manual training in the primary and grammar schools. We have drawing in all grades and with a few modifications this, the foundation of manual training, will accomplish its office of preparation. In the lowest primaries we have kindergarten methods with constant instruction in form, color, modelling in clay and sand, etc., which need only be extended on the same lines, as the complements of drawing, to form a good preparatory course for shop work in the high school grades, at which point the pupils have attained a physical and mental maturity that will enable them to handle real tools with effect.

"I would prefer a line of work with cutting tools, for instance, modelling and designing, followed by wood-carving for the girls; but a more complete preparation in the primary and grammar schools than we have now should precede any attempt to place such a course in the high school where alone it can be well managed."

In writing to the Bureau the superintendent says that it is hoped that a cooking school will be added.

Brooklyn, N. Y.—The superintendent's remarks are so extended that only an abstract of them can be given. He quotes Emerson to the effect that "Every thought that arises in the mind, in its rising aims to pass out of the mind into act, just as every plant, in the moment of germination, struggles up to light. Thought is the seed of action, but action is as much its second form as thought is its first. * * * What is in will out. It struggles to the birth. Speech is a great pleasure, and action is a great pleasure; they cannot be foreborne." The advocates of manual training, says the superintendent for himself, claim that it is essential to train the hand to express thought by "action" as it is to train the power of speech, and this is a more logical statement than to contrast brain training and hand training, as is sometimes done; it is thought expending itself in action, not the physical movement, that trains. As to the claim that manual training is education, that it trains the hand and the eye and the intellectual powers, that, the superintendent thinks, "is founded upon but a meagre field of observation." To offset such claim he quotes from Dr. Harris, of Concord, Mass., who says: "I do not think that the instruction of branches of manual training can be justified on the ground that they are of disciplinary value, and especially developing to the intellect, but if desirable at all their introduction must be defended on the ground of their general utility to the pupil as a future means of livelihood." To the claim that manual training lays the foundation for any trade he quotes from the same author that "Special training in one branch of manipulation gives the muscles a set in one direction and unfits the workmen for other employments. * * * In general, the trades that deal with the metals and wood unfit one for the manufacture of textile fabrics, for the latter requires delicacy of touch."

On the other hand the superintendent is disposed to think that sewing and cooking "come within the category of things universal, and therefore might, perhaps ought, to be introduced in all our schools," and this can be done without disturbing the equilibrium of the school work or adding materially to its cost. To fill the really existing need of

special schools to teach trades, the Pratt Institute (see p. 894) has been founded; but in the grammar and primary grades the superintendent believes that only universal studies should be taught, until experiment has demonstrated the fitness of manual training for introduction. If wood and metal working are to be introduced it should be done in connection with the scientific mechanical course that he has suggested for the Boys' Central School, where the courses are optional.

Jamestown, N. Y.—"Training of the hands and the muscles, with a view to practical uses in the future," says the superintendent, "is rapidly becoming an essential feature in the education of American youth. Already we have passed the limits of the field of experiment and many of our children are receiving the benefits of this department of instruction."

Newburg, N. Y.—"Our work in manual training," says the superintendent in a letter to this Office, "has proved very satisfactory. I do not think it has been a hindrance to other studies, but on the contrary, by increasing the interest of pupils in their school work, has incited them to greater activity in other branches. I think it has been the means of retaining pupils for a longer time in school."

"The carpentry course will be extended through a fourth year. During the past year a five-horse-power electro-motor, eight lathes and jig-saws have been introduced, and the salary of the instructor increased from nine hundred to twelve hundred dollars."

New York, N. Y.—As the city superintendent was a co-laborer in the work of preparing the report given on page 859, his opinions as to the value of manual training and the feasibility of introducing it into the public schools may be at least approximately inferred.

The president of the board of education remarks of the action taken: "The introduction of manual training of the simple and fundamental character proposed, so incorporated with the regular course as to be illustrative and helpful, will, it is believed, be of much practical value. It will at the same time be so arranged as to add no additional burden to the course, require no extension of the school hours, and displace no important studies."

"It will tend, it is thought, to increase the pupils' interest in their studies, to quicken their apprehension of them and of their practical applications, and to awaken natural ability. The monotony and burden of school hours will be varied, and the theoretical instruction there given be connected with the actual duties and necessities of life."

The number of schools having manual training is increasing, but no change or alteration of the course is contemplated.

Yonkers, N. Y.—The president of the board of education, in speaking of "industrial education," says that it can be properly arranged under two general methods: (1) general class-room instruction in the elements, aided by text-books graded to the capacity and progress of the pupils, as is the case with the subjects now taught in the schools, and by such object teaching with tools and industrial appliances as will best serve to illustrate the principles as they are taught; (2) manual training. The second method has been the one generally discussed and has been a stumbling block because educational authorities have recognized from the very outset that to commence a carpentry course would leave them no alternative but compliance should a demand be made for instruction in stone-cutting or machine-shop work, and to accommodate all would be out of the question by reason of the cost. "For these reasons the progress of industrial education in the public schools of this country has been slow, while the righteous demand for a more practical education increases daily. We do not believe that the public schools can or ought to be made to take the place of an apprentice system, or of regularly organized or exclusively industrial schools. We do, however, most earnestly believe in the great usefulness of a judicious employment of manual training to the easily limited extent of illustrating the principles taught in the class-room, and to that end and that only should tools and appliances be furnished for the use of the schools. We are profoundly impressed with the belief that a permanent, complete, and satisfying solution of the question will be found to lie in the direction of oral, text-book, and object instruction in the class-room in the elementary principles of mechanical arts in general, and their special applications in the various industrial vocations."

After noting that this instruction will impress the pupil with the dignity of labor and will increase the usefulness of the schools, the board recommend that a small appropriation be made for purchasing tools.

Cleveland, Ohio.—The president of the board of education in his report expresses himself on the subject of manual training thus: "The action of the board of education preceding ours, united with our own in availing ourselves of the permission of the Legislature to levy a tax of one-fifth of a mill for the purpose of training our scholars in manual and domestic purposes, proves to have been most advantageous and fortunate." The remarks of the superintendent touching the purpose for which the school was founded are given on page 891, this being a manual training school.

Columbus, Ohio.—"The subject known as manual training in more than one sense may be classed," says the superintendent, "as one of the most useful that can be incorporated in the course of study in a system of schools. * * * Were no other object attained than the general culture derived from the skill it gives to eye and hand and the training of mind, it would be of great value; but besides it excites an interest in industrial operations, and gives an opportunity for the development of power, which otherwise is likely to be overlooked." After describing briefly the introduction of manual training into the schools of France, the superintendent continues:

"In view of the successful experiment in Paris, is it any wonder that members of the board are enthusiastic, and conscientiously work for the incorporation of manual training in our school system? * * * I venture the prophecy that not many years will elapse before, with modifications and adaptations, it will become a part of the curriculum of the public school system of all enlightened nations. I do not see in its introduction the correction of all defects, but I do believe it will greatly improve the present system."

Erie, Pa.—The principal of the high school speaks of the subject of manual training to the following effect:

"It is apparent to the most casual reader that the chief topic of discussion at the present time in the education world is industrial education. Complaints of the inefficiency of our public school system in fitting our boys and girls for the practical duties of life are heard on every side. From press, pulpit, politician, statesman, and school man come the general charges that the public school courses are 'overloaded with too many embellishments;' that the common English of the fathers is side-tracked by too many 'extras;' that public school education is 'spread over too much ground;' that it is a mere 'method-grinding machine, run by teachers who are the slaves of routine and red-tapism;' that our public schools are 'too much taught;' that 'under the wise neglect of old-time methods boys and girls developed far more individuality and strength than under the modern coaxing-coddelling-explaining-everything system;' that the entire tendency of public school education is towards the 'abstract,' towards the occupations that 'involve only mental training,' and away from the occupations that demand the use of the hands."

The principal then quotes from public utterances of the governors of Massachusetts, New York, and Pennsylvania on the tendency of public school education to make industrial pursuits repugnant to the graduates of the public schools, and believing such statements untrue he applies the crucial test, examining the statistics of his own school since its foundation:

"The present occupations of those who have been educated in the public schools should most effectually show the truth or falsity of this charge. If true, the majority of such occupations should be *mental* in their character; if false, they should be *manual* or *industrial* in their character.

"These are the facts: In the 20 years from September, 1866, to June, 1886, there were 598 boys in attendance at the high school. As far as could be ascertained they were distributed at the close of the school year ending June, 1886, among the following occupations:

"In manual occupations there were: Trades, 85; railroaders, 22; farmers, 28; laborers, 7; ranchmen, 5; hackmen, 2; total 149.

"In industrial occupations there were: Business, 195; civil engineers, 9; telegraphers, 6; stenographers, 3; chemists, 3; dentists, 4; draughtsmen, 1; Congressional page, 1; clerks, 97; total 319.

"In mental occupations there were: Lawyers, 17; editors, 12; doctors, 7; teachers, 8; ministers, 5; literature, 1; artists, 1; total 51.

"Miscellaneous were: Army, 1; Navy, 3; dead and unknown, 19; in school, 57; total 80.

"That is to say, out of all the boys who had high school education in these 20 years 468, or 78 per cent., are found in manual or industrial occupations, while but 51, or 8½ per cent., are found in purely mental occupations. Does this look as if 'the main fault of our present system is that it leads directly and inevitably to that which is abstract and away from that which is practical?'

"To the objection that might be made to classifying 'clerks' as pursuing an industrial occupation, it may be said that if they are not *industrial* within the popular meaning of the term they surely can not be said to be pursuing a *mental* occupation. Indeed, oftentimes the calling of a clerk calls for more manual than mental expertness. Besides our book-keepers in bank or store, clerks also include those who serve behind the counter, and more frequently than any other the calling of clerk is the first round in the ladder that ends in business."

So interesting are these statistics, contrasting so pleasantly with the jail statistics, which are being made the most of to bring the public schools into contempt, that, although

somewhat inappropriate here, we will give the record for the girls. Of the 876 girls who attended the high school during the twenty years of its existence, 291 are at home, 243 are married, 122 are teachers, 22 are clerks, 22 pursue a trade, 4 are domestics, 40 have died, and 132 are in school.

"Industrial education—instruction in the principles of drawing and construction, and in the principles of the various trades—is undoubtedly a proper thing for our laboring population to get," the principal continues, "but it cannot be imparted successfully as a part of public school instruction without changing the entire character and scope of our public school courses. They would have to be reduced to a minimum in order to make room for the industrial feature."

New Brighton, Pa.—"We incline to the belief," says the superintendent, "that outside of industrial drawing, modelling, etc., more nearly in the line of illustrative school work proper, manual training is not suited to smaller nor below the average high towns school grade. The future is not clear. Well-qualified teachers are difficult to obtain and public sentiment is not ripe for it."

Pittsburg, Pa.—"The cooking school has been wonderfully successful and is very popular with our people," says the superintendent, "and it is likely that one or two more will be opened."

Reading, Pa.—"We are about to introduce manual training; it is pending," says the superintendent.

Tidioute, Pa.—"Manual training," says the superintendent, "makes our pupils think more of themselves, makes them more careful and practical. They do not despise work and are more self-reliant. It takes away much of the drudgery of school work. It strengthens the muscles, thus aids the mind. It interests parents, thus aids in government. It cultivates the perceptive faculties, demands close attention, connects mind with matter, thus laying a broad foundation."

"We have not yet done much in iron forging," continues the superintendent. "I think we will finally confine the boy's work to Sloyd. We desire to add household economy."

Williamsport, Pa.—In reply to a request for statistics, the Office having information that led it to believe, erroneously it appears, that this city had introduced manual training, the superintendent says, after correcting the mistake, "If it should, in the course of time, prove a success in places where it is now on trial, I feel satisfied that its claims as an educational factor will find recognition in this city."

Providence, R. I.—"There is no manual training in the public schools of Providence aside from drawing, paper-cutting, clay modelling, and sewing." A request for statistics has as yet failed to elicit a response.

Newport, R. I.—The school committeemen say that the subject of "industrial education" has engaged much of their attention during the past year, and they have watched with great interest the two schools that have been established by private individuals. "We are convinced," they say, "of the great utility of such schools, not only for the distinct items of knowledge they impart, but for the invigorating effect of their training in a practical way upon the regular school work."

"No way has yet been found by which the common and the industrial schools can be made to coöperate in point of their respective hours of session. The best way is not yet clearly apparent to engraft the subject upon the public school system in an intelligent, helpful, practical manner. What direction it shall take, where it shall begin and where end, what modifications it needs to bring it into our present course of instruction, are problems which environ the subject with difficulty. No more important education question has arisen in our midst for many years, and it is to be hoped that it will continue to hold attention until industrial training shall attain the footing in our curriculum which its importance demands."

Pawtucket, R. I.—Under the head of manual training the school committee says: "It is also desirable that in connection with our schools there be established, on a limited scale to begin with, manual departments for the especial benefit of the boys, wherein they should be taught the names and uses of tools employed in the mechanic arts—woods in variety, their different qualities and where grown, etc. Passing from our schools with even a slight technical knowledge which might with profit be imparted, it would prove to be of great value to them on entering upon their practical work of life."

Knoxville, Tenn.—The cooking school has recently been enlarged and it is contemplated to introduce manual training into other schools of the city.

La Crosse, Wis.—It is not yet decided as to the extension of manual training. "We are watching other places where shop-work in wood and iron is carried on," says the superintendent.

At the 43rd anniversary of the New York State Teachers' Association, Prof. E. A. Sheldon of the State Normal School at Oswego, read a paper on the "Mental Effect of Manual Training," in which he said that the term had a wide range of meaning, as it applies to all modes of expression through the instrumentality of the hand. The hand is employed to give expression to the ideas that exist in the mind. Manual training is simply language put in objective form. As no one questions the value of language in education, the value of drawing, painting, modelling, and the mechanic arts should also be recognized. Modelling comes first, as the simplest and easiest, and is capable of awakening the deepest interest in the child. It gives definiteness to mental concepts. After modelling follow geometric forms in paste-board and paper and the representation of such forms by drawing. Here again the mind is trained by deriving its concept from the thing which has been formed and drawn.

It is questionable whether we do not overrate the value of drawing for training the eye and the hand and underestimate its bearing on intellectual training, for it not only gives accurate concepts, but fixes them permanently. All that is true of work in plastic matter is preëminently true of work in rigid substances. "There is an instinct in a child that gives delight in overcoming difficulties, and leads him to enter upon this part of his work with that lively interest that insures the most intense and fixed attention." A pupil will carry on quite as much intellectual study in connection with tool-work as without it, and with more ease. The work, as physical exercise, refreshes and invigorates, and as mental training awakens a feeling of conscious strength and moral dignity.

No distinction should be made between the boys and girls in giving book instruction, since it is as much adapted to the latter as the former. Sewing and cooking are not as effective as the other forms of manual training. Modelling and drawing as mind-training studies are beyond dispute; as to shop-work, it is not yet so certain, but in all probability will be a valuable aid *if educational results are uppermost.*

At the thirty-fourth annual session of the State Teachers' Association of Pennsylvania, in September, 1888, a symposium about "industrial education" was a feature of the occasion, the speakers being Mr. Powderly, the head of the protective association of workingmen, Mr. Fetterolf, president of Girard College, and Mr. Miller, principal of Girard College Manual Training School. Mr. Powderly said that all the change which has swept over the face of nations in the last thirty years is attributable to the work done by the schoolmaster, for he gave the foundation to the inventive brain, which had invented railways and constructed mills, furnaces, and shops, "and through the stimulating influence of our public school system, the best the world has ever known, we find the United States ahead of all the nations of the earth in point of advancement in ideas, perfection in machinery, and skill in the management of it." But the schools are not as good as they will be when they train the mind and hand together. Were a shoemaker, dead thirty years ago, to enter a shoe manufactory of the present day, he would turn away sick; he would be unable to understand the "machine stitcher, heeler, welter, laster, pegger, waxer, and buttoner." The man of thirty years hence will be even more puzzled, "for the wonderful machines that we use to-day will pale into insignificance compared with the machines of the near future." What has this to do with the American youth? Everything. He must not stand in idleness, waiting for something to turn up that he knows how to do. A system of industrial schools in which the uses of tools and the importance of science and art should be inaugurated for him, because an apprenticeship of four to seven years may only put him in possession of a trade for which there is no use. Unskilled labor will soon be unknown, and everything will be done by the aid of "one of the new agencies of force," directed by the hand of science. "Trades should not be taught in schools; but the American youth should be so instructed in hand and brain as to enable him to cope so successfully with the agencies of the world's production as to break the power of the unscrupulous employer, and make machinery the slave of man, instead of the hard, unrelenting master it is to-day." Every school should have a machinery laboratory, and a miniature farm attached, and the use of the shovel, the pick, and the plough should be taught as well as that of the lathe, anvil, and painter's brush.

Mr. Fetterolf said in his paper that the education of the great mass of the people of our country was done in the public schools, and as they leave the school they carry with them the ideas and habits which they have found in them, and their failure or success in life is in a large measure due to these schools. The school should teach the pupil how to think and work, to earn his bread, to be a useful member of society, a good citizen, and to enjoy life. The school of to-day educates in only one direction—it fails to meet the requirements of our changed social condition. It is to be expected, perhaps, that the teachers themselves will not be the first to see the defects in any system of education; it is the men who employ our boys who are to judge of the training they have received.

Professor Miller in his paper said that two things might be regarded as definitely settled already: 1. That the moral effect of associating some form of industrial training with the purely mental discipline for which the common school has stood hitherto would be very great in inculcating just ideas of the dignity of manual employments, and promoting the higher and nobler views of life which the entertaining of such ideas implies. 2. That we are firmly committed to the policy or principle of depending upon the public school to supply a good many wants with which its functions were regarded as very remotely connected only a few years ago; and that among these wants is that of skill in the trades, the decline of which has attended the decay of the apprentice system.

At the thirtieth annual meeting of the New Jersey Teachers' Association Principal John M. Green made a statement that of 160 teachers all but 25 thought that manual training should be taught in the public schools. All but 39 were doing everything possible in the way of manual training. Only 77, and these are mainly in country schools, are not doing kindergarten work.

"Our thoughts," says the State superintendent of California, "are ever seeking expression, either in speech or in action; and to express thought by action we must either embody the idea in concrete form or pursue some particular course of conduct. A complete education requires the training of the hand to express thought by action, as well as the training of the intellect and the power of speech.

"While some persons may dispute the last assertion, all must admit that it is not the mere action itself that trains, but the expression of the thought in the action. The aim of manual training is complete development, and when properly adapted to, and connected with, other accepted school training it should produce artful hands, seeing eyes, and well-trained minds, able to express thought in things as well as in words; able not only to express beautiful forms on paper, but to embody those forms in clay, wood, or metal. Just how far manual training should be carried as a part of the course of training in our public schools must depend upon future experience. In my opinion the public schools should not be called upon to teach special trades, but they may properly lay the foundation for any trade and become a help in selecting some particular trade.

"Multitudes of boys and girls, young men and young women, terminate their school and college days every year who do not know how to turn their brains or their hands to any one occupation by which they can earn an honest living. The State is wealthy in proportion to its producers rather than to its consumers; it is therefore argued by many wise men that the State should take the industrial education into its own hands."

The State superintendent of North Carolina discusses the subject of manual training in the following terms: "Education is not merely, or perhaps principally, book learning, not merely a knowledge of reading, writing, arithmetic, English grammar, geography, history, etc., which the boy or girl may carry into every-day work, but education is development of brain power—a development of all the faculties of the mind along with physical power and a knowledge of facts. Our young people must be taught to think, reason, and observe for themselves, and any process that secures this result will educate them. There is much discussion now about manual and industrial training in the public schools, and the leading argument in its favor is that in the exercise, mental and physical, of doing work with the hands, the young people are not only developed physically, but are taught to reason, think, and observe for themselves, and in a practical way to apply what they learn from books. * * * Because manual labor is so great an educational factor, and because children in cities have not so great opportunities in this direction as do the children in the rural districts, manual training for the children of the cities in some substantial way, either by private means or in the public schools, is a thing very much to be desired."

INDUSTRIAL ASSOCIATIONS.

A meeting looking to the organization of an industrial association was held in Baltimore, Md., June 24, 1887, and a permanent organization effected in November following. Many of the teachers belong to this society.

In his report to the board of trustees of the New York Industrial Education Association, the president sums up the work of the year. Of his remarks we will attempt to give but an outline.

Education, says Dr. Butler, has escaped from the theologian and philanthropist, but lingers in the hands of the politician. It is a science, and as a science means the study of the child and its environment, means death to whims and fancies, and the gradual displacement of crude theory and imperfect methods. This is the platform of the New York Industrial Association, which "believes that education is the training of the child for life, and that as our knowledge of the child increases and the conditions of life change, the means of education must be adapted to this knowledge and to these conditions. It views education as not stationary, but progressive, and holds that any enduring

ing advance must be the product not of revolution, but of evolution." Industrial training to have its fullest value must be an integral part of general education. This is the fundamental principle of the work of the association. If manual training is technical training, if it is only a passing fancy, then the association's work is in vain, but as manual training is neither, its work is justified and will be successful.

The work is of two kinds, propagandising by literary methods and by establishing schools. In the literary way a series of leaflets and another of monographs are published, and a most extensive correspondence, foreign and domestic, obtains with those interested in the propaganda, while the officers lecture most assiduously.

In the educational way, a college, a model school therefor, and a number of special classes have been instituted. The college and its model school have been fully spoken of in the chapter dealing with the training of teachers; only the public school and "extra classes," therefore, claim space here.

The pupils of several public schools in the vicinity having been invited to enjoy a course of manual training free, over two thousand four hundred applied, of whom only one thousand four hundred could be received. "Overflow classes" were formed, meeting in the evening and on Saturday morning. As these classes were held during the hours of recreation, they dwindled until they numbered in all 508.

"In accordance with our policy," says Dr. Butler, "of reaching as many teachers and students as possible, we have found extra classes for applicants whenever possible." There were 7 such classes in domestic economy, having 111 students, during the year. Trained teachers were also furnished to other schools. Several large institutions and prominent private schools have been reached in this way. In sewing 466 pupils have been instructed in 9 classes, in domestic economy to 251 in 12 classes, in industrial art to 37 in 2 classes, and in wood-working to 65 pupils in 3 classes; in all 33 classes and 930 pupils.

CHARACTERISTICS OF MANUAL TRAINING IN PUBLIC SCHOOL SYSTEMS AND STATISTICS FOR 1887-88.

So much is being said about manual training as a theory that its existence as a fact has not received the attention that would have been accorded had its growth been more uniform and its advocates more consistent. Naturally it is to this Office that the educating public looks for information as to the annual condition of manual training and the progress it annually is making. In our last report we endeavored to find our way to some conclusions, though hampered by want of statistics, and the rather diverse grounds upon which the subject was being introduced.

Since that report the theory of manual training has assumed a definite form, and we hope that our tables, the first of their kind and, perhaps, not immaculate, will also give a definite form to the *facts* of the subject.

TABLE 71.—Showing Number of Instructors, and Pupils in the Several Branches of Manual Training.

System of Public Schools.	Year of In- troducing—		Instruct- ors of—		Grades Taught.	Pupils.						Leave School Building.
	Drawing.	Construction or Other Form Work.	Drawing.	Construction or Other Form Work.		In Wood-working— Boys.	In Sewing—Girls.	In Cooking—Girls.	In Construction Work.	Whole Number.	Forming a Class.	
1	2	3	4	5	6	7	8	9	10	11	12	13
1 New Haven, Conn.	1884	1886	(3)		Woodw'k, 7 & 8; sewing, 4, 5, & 6; cooking, 7th.	240	All	All		12,000		For woodw'k and cooking.
2 Washington, D. C.	1874	1886		14	All	1,020	3,000	921	34,850	24,850	12-18	For shop-work and cooking.
3 Beardstown, Ill.	1883	1886		1	7th and 8th	0	(a)	0	All	50	12	No.
4 Moline, Ill.	1879	1883			All below high school	20	18	0				No.
5 Peru, Ill.	1885	1883		2	Grammar and high school	20	0	0		42	20	For woodw'k.
6 Humboldt, Iowa.	1887	1887		1	6th to 10th	24	0	0		24	12	Yes.
7 Okaloosa, Iowa.	1885	1886										
8 Boston, Mass.	1871	1881		36	Upper grammar grades	350	10,000	1,500	0	11,850	20	For woodw'k and cooking.
9 Springfield, Mass.	1870	1886		1	Grammar and high school	126	0	0	0	126	12	Yes.
10 Winchester, Mass.	1872	1887		2	Woodw'k, 8 and 9; sewing, 4-6 years.	15	6250	0	0	265	615	For wood-work.
11 Minneapolis, Minn.	1878	1887		5	Woodw'k in high school	150		0	0		15-20	No.
12 Stillwater, Minn.				1	High school and lower						6	No.
13 Concord, N. H.	1886	1886		1	Boys 14 years of age	100	0	0	0	100	10	Yes.
14 Mont Clair, N. J.	1873	1882		1	All	40	115	0	40	230		No.
15 Paterson, N. J.	1887	1887	2	1	All	378			7,913	7,913	24	Yes.
16 Albany, N. Y.	1876	1885		1	High school	250		0		250	24	No.
17 Jamestown, N. Y.	1881	1877		7	All	148	155	12	1,324	1,674	(a)	For cooking.
18 Newburg, N. Y.	1880	1886		2	Woodw'k, 7-10 yr's; sewing, 2-4	101	434	0	0	640	12	For woodw'k.
19 New York, N. Y.	1875	1883		8	All	398	1,919	311	6,176	6,176		No.
20 Newburg, Pa.	1885	1887	(b)		All	0	0	0	1,825	1,825		No.
21 New Brighton, Pa.	1881	1886		3		50	50	0	0	160	25	No.
22 Tusburg, Pa.	1880	1887			6th y'r	0	0	300	0	300	15	Yes.
23 Tidoute.	1887	1885	(a)	4	All	38	100	0	0	200	(a)	Yes.
24 Knoxville, Tenn.	1883	1884		5	1st, 5th, and 6th	50	105	103	0	(a)	25	No.
25 Eau Claire, Wis.	1879	1884		3	Grammar and high school	54	0	0	All	175	10	Yes.
26 La Crosse, Wis.	1884	1886			All							No.
Total.....				99		{ 3,552	{ 16,146	{ 3,149	51,828	78,450		
						(50)						

a See p. 890 et seqq.

b Both sexes.

In preparing its form of inquiry the Office included the query as to the date of introducing *industrial* drawing as giving information by implication and, in addition, as a means of comparison with the date of the introduction of construction work. It cannot see that there is any inference to be drawn from the comparison. The dates are, as a rule, very far apart or quite close together. In two or three cases drawing followed manual training.

But it is surprising to find how near the beginning we are of the adoption of manual training. Two-thirds of the systems have only been practicing manual training since 1886; not quite half have been established within a twelve-month, and Jamestown, N. Y., where the system has gradually been introduced since 1877, is quite old in this respect. This is called to the reader's attention, since it entails incomplete statistics.

The statistics for drawing, teachers and pupils, were not asked for, although several superintendents in their efforts to oblige the Office have included them. In New York City and in Meadville and Tidioute, Pa., every teacher is a drawing master or mistress, and it is presumed to be the same in many places.

As to the statistics of the teaching body, it may be said that wood-working requires a special teacher; and cooking and sewing, in all likelihood, may be placed in the same category. Jamestown, N. Y., and Knoxville, Tenn., have both an abnormally large corps of instructors, due to the wider range of the training, both having introduced printing. At Eau Claire, Wis., Minneapolis, Minn., and Tidioute, Pa., where the work is well organized, the instructing corps is large in proportion to the other statistics.

The column giving the grades in which instruction is given is intended merely to show where the training as a whole occurs, and not in what particular grades each subject of the course is taught, although in two or three instances something of the kind has been attempted. A full synopsis of each return is given in the text¹ to obviate constantly saying a thing and then modifying it in the table. Wood-working is only for boys of the upper grammar and high school grades; that is plainly shown.

Sewing has no particular place. In one place it is given during the "second to fourth years," in another during the "fourth to sixth years;" in another in the "fourth to sixth grades;" in another in the "seventh and eighth grades." Grades or years do not mean much, however, until it is known that the "first grade" is not the last one.

Cooking is a grammar school study, though the table does not show it. Construction is the connecting of the kindergarten with the subjects of tool work, cooking, and sewing; this also the table does not show; nevertheless it is a fact, as shown by the programmes, pp. 852-856. Any changes in curriculum that the introduction of this study has caused, that is, in the way of forcing out the older and established studies, are noticed under city systems.

Considering columns 7-10 we find that all manual training work above the kindergarten may be grouped under the four heads of those columns. Wood-working is the work for boys, while sewing and cooking are for girls and construction work is taught to both boys and girls. The introduction of wood-working is not always accompanied with sewing much less with cooking, but it is very evident that where sewing and wood-working are both present, the sewing pupils are frequently far more numerous than the wood-working. Take Newburg, for instance, where the disparity is as 4 is to 1, or New York, where it is almost 5 to 1. This is natural, for sewing is, like drawing, perfectly consistent with work of the school-room. In an age when sewing machines are constantly becoming cheaper as patents expire and "the condition of a sewing girl" is synonymous with poverty, the commercial value of sewing must be small, and even its domestic value, except in certain forms, not what it was thirty years ago; but the habits of attention which it engenders, facilitated by having something tangible to attend to and its peculiar character as a feminine occupation, eminently fit it for the manual training of girls, although it is said to be not so effective as other forms (page 872).

As far as the table goes Washington, Boston, New Haven, New York, Pittsburg, and Knoxville are great centres of cooking. At Washington, Boston, New Haven, and Pittsburg the central school plan has been adopted, as described in the report preceding this. At New York and Knoxville this objectionable feature does not obtain. New Haven has just introduced the work; at Pittsburg it is likely to be extended, although the New York Committee on Manual Training, reporting June 29, 1887, say that as to the introduction of cooking into this city it had not yet even been dreamed of. It appears that the introduction has been facilitated by private means, a citizen, Mr. Phipps, jr., having employed a teacher.

It is difficult to see how construction work, as a matter of training of the sense of form and of developing constructive faculty, can be objected to. None of the disagreeable elements of shop-work, so strenuously urged by the opponents of manual training, are present; no central shop, no shop in garret or cellar is necessary; the work is done at the pupils' desks. "Modelling," says Mr. Chas. G. Leland,² "is drawing in clay. Any

¹ Page 880 *et seqq.*

² Circular No. 4, 1882, of this Office.

child who can copy an old shoe with a pencil can make it from a plastic material. More than this, it is easier to model anything than to draw it." The geometrical conceptions implanted by construction (geometrical forms in paper and clay) cannot fail to commend the work to those who would sustain the study of geometry when it has become a matter of definitions, axioms, and logic. In fact, to attack it is to attack object-teaching, and thus reverse the usual order of present educational procedure. Drawing is intimately connected with construction, the two advancing hand in hand. If the reader will turn to p. 843 this fact will be shown as practiced in the schools of Moline, Ill.

At Washington undoubtedly is manual training the most extensively introduced; New Haven following, and Paterson, N. J., where "clay moulding, sewing, and kindergarten work" is "preliminary to all," comes next. In New York City the work has been introduced into several schools only and is an experiment. In Meadville, Pa., and Jamestown, N. Y., the work is thoroughly introduced, and those systems give the instruction only to twelve or fifteen hundred pupils because there are no more to give it to.

Of the 20 systems giving instruction in wood-working 7 have a shop in the building in which the manual training pupils pursue their literary studies. In New York City there is known to be more than one school thus provided with a shop. Beardstown and Minneapolis are known, and Mont Clair thought to have but one shop. Cooking, with the exception of New York City, also requires the pupils to attend a central school.

The totals have been obtained, as they may be of some use to the reader, though inadequate for statistical manipulation.

TABLE 72.—*Number and Duration of Lessons a Week for Manual Training Classes.*

System of Public Schools.		Lessons a Week in—							
		Wood-working.		Sewing.		Cooking.		Construction.	
		Number.	Duration of each.	Number.	Duration of each.	Number.	Duration of each.	Number.	Duration of each.
			Hrs.		Hrs.		Hrs.		Hrs.
1	New Haven, Conn.	1	2			1	2		
2	Washington, D. C.	2	2	1	1	1	2	2-5	4-1
3	Beardstown, Ill.	2	1	2	1	0	0		
4	Moline, Ill.	0	0	4	1	0	0		1
5	Peru, Ill.	4	$\frac{1}{2}$	1	$\frac{1}{2}$	0	0	0	0
6	Humboldt, Iowa.	2	1	0	0	0	0	0	0
7	Oskaloosa, Iowa.	0	0	1	3	1	3	0	0
8	Boston, Mass.	1	2	2	1	1	2	0	0
9	Springfield, Mass.	1	$\frac{1}{2}$	0	0	0	0	0	0
10	Winchester, Mass.		1		$\frac{3}{4}$	0	0	0	0
11	Minneapolis, Minn.	5	$\frac{1}{2}$	2	1	0	0	1	1
12	Stillwater, Minn.	5	1	0	0	0	0	1	1
13	Concord, N. H.	1	$\frac{1}{2}$	0	0	0	0	0	0
14	Mont Clair, N. J.	2	1	2	1	0	0	2	1
15	Paterson, N. J.								
16	Albany, N. Y.	2	$\frac{1}{2}$	0	0	0	0	0	0
17	Jamestown, N. Y.	3	$\frac{1}{2}$	2	$\frac{3}{4}$	1	(a)	4	$\frac{1}{2}$
18	Newburg, N. Y.	1	3	1	1	0	0	0	0
19	New York, N. Y.	(b)	2	1	1	1	1	5	$\frac{1}{2}$ -1
20	Meadville, Pa.	0	0	0	0	0	0	3	$\frac{1}{2}$
21	New Brighton, Pa.	2	1	2	1	0	0	0	0
22	Pittsburg, Pa.	0	0	0	0	1			
23	Tidiloute, Pa.	3	1	2	1	0	0	0	0
24	Knoxville, Tenn.	2	1	2	1	2	1	0	0
25	Eau Claire, Wis.	2	$\frac{1}{2}$	0	0	0	0	0	0
26	La Crosse, Wis.								

a "One day each week."

b See text, p. 882.

Considering Table 72 as a whole, it is a matter of some difficulty to arrive at any general conclusion. If the reader will turn to page 853 he will find the manner in which the several subjects have been woven into the public school curriculum of New York City, and can draw safer conclusions than can be conveyed by many words.

Considering the columns individually, lessons in wood-working consume about two hours of the week. Minneapolis and Stillwater, Minn., are decided exceptions to this, at each place a daily lesson being given; but in both instances wood-working is confined to the high school pupils. Had the superintendent of Minneapolis filled the blank for manual training schools (those contained in the second part of this section) the statistics

of the wood-working department would have been included with them; for it is contemplated to introduce metal-work (forging?), and the school will probably follow the type set by the St. Louis Manual Training School.

The lessons last for one hour, or for two, according to their frequency during the week. In making these, as in making the following general statements, variations have not been noted, and the statements should be compared with the table itself. Sewing shows more uniformity; the time a week is two hours, the number of lessons two as a rule, the time an hour for each. Peru, Ill., is quite an exception.

One lesson is given in cooking a week. At New Haven, Washington, Boston, and Oskaloosa the time is two or three hours a week; at New York and Knoxville, one. As to construction work it seems that in several instances it has just got a finger into the glove, if the curriculum of the public schools may be compared to a glove, and in others has got the whole hand in, and has the usual thirty minutes consideration every day or two.

TABLE 73.—*Cost of Introducing and Maintaining Manual Training*

System of Public Schools.	Cost of Plant.	Teachers' Salaries.	Cost of.		
			Materials.	New Tools and Repairs.	Incidents.
1	2	3	4	5	6
New Haven, Conn.....	\$1,000	\$900	\$119	.....	420
Washington, D. C.....	5,000	7,550	500	.....	.....
Beardstown, Ill.....	200	300	25	10	10
Moline, Ill.....	.....	.....	113	.....	.....
Peru, Ill.....	300	125	20	5	0
Humboldt, Iowa.....	100	100	20	.....	.....
Oskaloosa, Iowa.....	(a)	0	100	.....	.....
Boston, Mass.....	.....	.....	.....	.....	.....
Springfield, Mass.....	500	1,200	185	806	118
Winchester, Mass.....	150	500	100	.....	.....
Minneapolis, Minn.....	.....	.....	.....	.....	.....
Stillwater, Minn.....	300	.....	.....	.....	.....
Concord, N. H.....	500	700	150	100	50
Mont Clair, N. J.....	350	450	.....	.....	.....
Paterson, N. J.....	198	940	440	424	82
Albany, N. Y.....	600	800	175	10	15
Jamestown, N. Y.....	.....	1,200	80	10	15
Newburg, N. Y.....	705	1,400	479	1,080	99
New York, N. Y.....	4,509	1,491	3,075	.....	301
Meadville, Pa.....	90	350	50	.....	.....
New Brighton, Pa.....	500	400	.....	0	.....
Pittsburgh, Pa.....	800	1,100	200	.....	.....
Tidoute, Pa.....	2,000	900	200	500	50
Knoxville, Tenn.....	.....	1,447	115	199	361
Eau Claire, Wis.....	325	720	30	10	5
La Crosse, Wis.....	.....	.....	.....	.....	.....
Total.....	18,127	22,373	6,179	3,154	1,526

a Donated by ladies.

b Paid by a citizen for two years.

One of the great objections to introducing manual training is the cost. This is perfectly valid as applied to the shop adjunct in which wood-working is given, but it will not hold against construction work, which has lately taken a definite shape.

The New York committee on manual training gave the following estimates of the cost—

(a) Of beginning:	
Workshop outfit.....	\$300
Kitchen outfit.....	200
Construction or preparing room for each.....	60
(b) Of maintaining for a year:	
Renewing outfit, 10 per cent.; of—	
Workshop.....	30
Kitchen.....	20
Material for—	
Wood-working.....	50
Kitchen.....	100
Sewing.....	50
Construction work.....	25

To pay the teachers necessary to instruct 60 departments in wood-working, cooking, and sewing, respectively, and 240 departments in construction work, the committee estimate that \$65,000 would be required and, in addition, \$3,500 for an assistant superintendent. The committee does not say what each kind of teacher should be paid, or how the amount should be apportioned; but as it gives the cost of introducing manual training as construction work and sewing into all these schools, and as wood-working and cooking into one-third of the grammar schools (of which there are 60), some idea may at least be obtained of the relative cost of the force teaching these wood-working and cooking, it being understood that a teacher of cooking is not available as a master of a wood-working shop, and that both subjects are grammar school "departments."

The cost of teaching construction and sewing in all the schools and wood-working and cooking in 20 grammar schools will be, estimates the committee, \$25,000; that is, for teachers' salaries. The estimate, as stated above, for salaries of a force to teach the several forms of manual training in all the city schools, including wood-work and cooking in 60 grammar schools, is \$65,000. It follows then that the cost of the force for teaching wood-working and cooking in 40 grammar schools is \$40,000, and as for 60 grammar schools it would be \$60,000, the comparatively insignificant sum of \$5,000 is left for the teaching of sewing in 60 grammar schools and construction work in 240 "departments." Considering this and the fact that no outfit is required or workshop to be fitted up, objections to the costliness of construction work are not well founded, unless the word be used by the objectors in a figurative sense as applied to waste of time.

Returning to the inferred estimate of \$40,000, and for the sake of the argument considering the teachers of wood-working and cooking to be on an equality as to pay, \$20,000 may be assumed to be the cost for the teaching of 40 wood-working "departments" or shops; that is, \$500 for teaching each department; not \$500 a teacher, however. It is the same for cooking. Having obtained the cost of teaching we can now complete the committee's estimate. Using the figures given above and forming a table, the cost of starting and running a wood-working department for one year has been estimated to be:

Outfit.....	\$300
Preparing room.....	60
Material used.....	50
Teaching.....	500
Total cost of wood-working for first year.....	910

The following year it will be about \$580, the new tools and repairs about \$30.

If there be in Table 73 any systems having, so far, only introduced one subject, and which also give the number pursuing it, some averages could be made. Such, in point of fact, there are for wood-working and for cooking; sewing and construction are too expensive to call for comment. In our last report, however, it was remarked that the cost per capita of introducing wood-working "is a very difficult question to discuss. The word 'equipment' may include many things at one place not included by it at another, vitiating results as to per capita cost. Nor is this the only obstacle. In a public school the pupil or his fictitious representative 'in average attendance' occupies the same desk every day of the school year, in these schools for manual training only an hour or two every week, and then gives place to another." From this it will be understood what is meant by "Attendance Weekly" and "Size of Class" in the following table and why we use these terms:

Per capita cost of instruction in wood-working.

System of Public Schools.	Lessons a week.		Size of Each Class.	Per capita cost of—			
	Num- ber.	Duration of each.		Outfit, based on—		Maintaining, based on—	
				Attend- ance Weekly.	Size of Class.	Attend- ance Weekly.	Size of Class.
		<i>hours.</i>					
Humboldt, Iowa.....	2	1	12	\$1.17	\$8.33	\$5.00	\$10.00
Boston, Mass.....	1	2½	20	a5.00	50.00	7.50	75.00
Springfield, Mass.....	1	1½	12	b5.68	41.66	623.27	6192.66
Concord, N. H.....	1	2½	10	5.00	50.00	10.00	100.00
Albany, N. Y.....	2	2 ¾	24	2.40	26.00	4.00	41.65

^a This has been inferred in this way: The total cost for the first year, outfit and maintenance, was \$2,500 for 20 pupils; that is, \$12.50 or \$125. For the last year for maintenance alone it was \$1,500; that is, \$7.50, or \$75. The expense for maintenance during the last from the expense for maintenance and outfit of the first year leaves the amounts we have given.

^b Not including a class of 38 teachers.

Cooking is the only form of manual training that has as yet been introduced into Pittsburg, thus giving an excellent opportunity for instituting the inquiry now in hand. The cost of the outfit ("fitting up the room") was \$800, and the classes are composed of 15 pupils, \$53.33 per capita on that basis, but as there were 5 different classes instructed each week for ten weeks and forty weeks in the school year, 300 pupils were instructed, and on such a basis extraordinary the per capita cost would be \$2.66; such is the duplicity of per capita. The expense attending the instruction for the year was \$86.66, on the basis of a class of 15; on the number instructed, however, it was much lower, being but \$4.33. At New Haven cooking is estimated to cost \$1,000; size of class not given.

By referring to Table 79, Column 2, it will appear that the cost of the outfit of the schools of this table is very much smaller than the value or cost of the apparatus of the schools there given.

Springfield, Mass., pays its teacher \$1,200; New Haven, \$900; Concord, \$700; Albany, \$800; Mont Clair, \$450, all in charge of wood-working. At Pittsburg the cooking teacher is paid \$1,100; at New Haven, \$700. As to the pay of sewing teachers there are no statistics; and construction work is so interlaced with the regular school work that it is perhaps impossible to separate the two so as to obtain the cost of teaching.

The cost of materials is far less than the amount paid the teaching force, which is, according to the table, by far the most expensive feature of maintaining this instruction; for the heavy expenditures for tools and building to begin work with is only an immediate one. The incidentals in some cases include rent. The cost for material in New York is due very likely to the fact that this is the year of beginning, and that expenses for new tools are included, it being impossible to separate them from the cost of material.

ABSTRACTS OF THE RETURNS TO THIS OFFICE.

Oakland, Cal.—A beginning of manual training at Oakland, California, was made, apparently at the opening of 1886-87, by connecting with the Lincoln School there. A large carpenter shop has been equipped with lathes, 21 work-benches, and 21 sets of tools for working in wood. Classes are formed and come to the shop at stated times for instruction. Principal McClymonds is assisted in the work of instruction two half days each week by the department mechanic. A drawing teacher also gives instruction in the shop as needed.

New Haven, Conn.—The several forms of manual training (introduced in 1886, two years after the introduction of industrial drawing) employed in the schools of this city are as follows:

1. Drawing: Two teachers are employed in teaching form-study and free-hand drawing, and another in teaching mechanical drawing.

2. Kindergarten: One kindergarten, with two teachers, is carried on in connection with the training school. The occupations and other forms of busy work are universally employed in the primary schools.

3. Sewing is taught all girls during the fourth, fifth, and sixth years of school life.

4. Cooking and domestic economy: Instruction is given in this branch to girls in the seventh grade two hours a week.

5. Wood-working: Boys in the seventh and eighth grades receive two hours' instruction a week in this branch.

The pupils leave their regular building to receive instruction in wood-working and cooking, the last subject having been just introduced. The total number of pupils receiving manual training is about 12,000.

The cost of the plant for wood-working only was about \$1,000; for a teacher of this subject during the year, \$900; for materials \$119, and for incidentals \$420. Cooking, as estimated, will cost \$700 for an instructor, \$125 for rent, \$125 for material, and \$50 for incidentals.

Washington, D. C.—Drawing was introduced in 1874, manual training in 1886. Kindergarten work in the first four grades, sewing in the 4th, 5th, and 6th, shop work and cooking in the 7th and 8th, and high school (where wood-work, however, is exchanged for metal-working), and model construction and drawing in all the grades form, it will be seen, a closely connected and progressive course. The pupils leave their buildings for wood-work and cooking.

The regular teachers, 520, teach model construction and drawing to 34,850 pupils, in lessons lasting from fifteen to twenty minutes, in the lower grades for four or five times weekly; in the upper grades for one hour, two or three times weekly. Sewing is given to three thousand girls by three teachers in one lesson weekly, lasting for one hour. Cooking is followed by 921 girls, who are instructed once weekly for two hours by four teachers.

Shop work falls into two divisions: (1) Wood-working, six teachers, 1,020 pupils; two lessons of an hour, or one lesson of two hours a week; (2) foundry and forge, one teacher, 112 pupils; two lessons a week of one hour, or one lesson of two hours.

In model construction and drawing, forty or fifty pupils (the school) forms a class, and of these there are 520, excluding high, normal, and rural schools. A sewing class, of which there are sixty, is made up of about fifty; a class in wood-working, of which there are ninety, of from twelve to eighteen; a class in metal-working, of which there are fifteen, is also made up of twelve or eighteen, and the sixty cooking classes have each fifteen pupils.

The outfit cost \$5,000; teachers, \$7,550; materials, \$500.

Beardstown, Ill.—The work introduced in 1886, three years subsequent to the introduction of industrial drawing, embraces (1) primary busy work; (2) moulding relief maps and other forms; (3) making simple apparatus; (4) shop work and drawing. The drawing is under the charge of the regular teachers. Wood-carving, scroll-work, joinery, and geometric forms are under a single instructor.

Manual training is given in the seventh and eighth grades; the girls, as yet, only receiving instruction in design, etc. The shop in which the boys receive their instruction in joinery is located in the basement of the school building in which they pursue their other studies. About 12 pupils form a class. The number of pupils who received manual training was 80, the lessons a week were 2, each continuing for an hour.

The cost of the plant was about \$200, for the teacher during the year \$300, of materials \$25, of new tools and repairs \$10, and of incidentals \$10.

Moline, Ill.—Industrial drawing was introduced in 1879, followed in 1883 by what Superintendent Mack prefers to call a "course in hand-craft," for the grades below the high school (see p. 843), very systematic, conservative, and it is understood effective. The course is for the most part based on drawing, being adapted to pupils of both sexes and all ages, and developing æsthetic and constructive sense; and not requiring the pupils to leave their room. Materials cost \$100 to \$125 for 1887-88.

Peoria, Ill.—Under the head of "industrial training" the superintendent of this system speaks of the wood-working instruction given in the high school building. The 30 pupils following the course belong to the third and fourth years of the high school. We regret we have received no response to our inquiries.

Galesburg, Ill.—For the past four years kindergarten principles have been employed in the primary grades, and during the last year wood-working instruction has been attempted, the basement of the high school building being used for a shop. At first the work was carried on under a student of the Chicago Manual Training School, for an hour daily.

Peru, Ill.—Here manual training preceded industrial drawing by two years. The training takes the name of carpentry and sewing. It is intended to add wood-carving to be done by the students at their desks as drawing now is.

There are two instructors, one for carpentry, another for sewing. To the carpentry class, composed of 20 pupils of the grammar and high school grades, instruction is given four times a week, each lesson continuing for 45 minutes. To receive these lessons the boys leave their building. To the girls, a class of 18 high school pupils, four sewing lessons are given weekly, each lesson lasting for 45 minutes.

The plant cost \$300. The teachers received \$125 during the year, and the material used cost \$20. For new tools and repairs \$5 were expended.

Humboldt, Iowa.—Manual training, as also industrial drawing, was introduced here in 1887. The object is to give instruction in the care of tools and in elementary joinery.

The instruction is given to two classes of 12 each, composed of boys and girls drawn from the sixth to the tenth grades. Two lessons are given a week to each class, the lesson continuing for one hour, the pupils leaving their building.

The plant cost \$100. For the year the teacher was paid about \$100, and the material cost \$20.

Oskaloosa, Iowa.—Manual training was introduced in 1886, and was preceded one year by industrial drawing. The characteristics of this course are original designing in drawing, pupils advancing from simple designs to those of floor mats, wall paper, etc., while cooking and sewing are given to the pupils of the Saturday evening school. In this Saturday evening school, originally for the poor only, the classes in the several subjects assemble, the pupils retaining for their own what is sufficiently well made to be used.

The classes, composed of six or eight, are under the charge of eight teachers and receive instruction for about two hours once a week. The whole number of pupils receiving this instruction was 130, drawn from the primary grade.

The outfit was a donation of a number of ladies, the teachers give their services gratuitously, the materials not donated cost \$100. "Last summer [of 1888]," says Superintendent Scott, "the school board appropriated \$150 in aid of the Ladies' Industrial School and opened in one of the school buildings in the other end of the town to aid pupils in that locality."

Boston, Mass.—Industrial drawing was introduced in 1871 and manual training 1881 to 1883. Sewing is well established; carpentry and cooking are but experimental. The pupils leave their building to receive instruction in cooking and carpentry.

Sewing is taught twice a week to about 10,000 girls in the fourth, fifth, and sixth years of their school course. These classes are taught by 30 teachers; cooking is taught to about 1,500 girls of the two upper grammar classes by 4 teachers once a week for half a year. Carpentry is given to 350 boys of the two upper grammar classes by 2 teachers once a week for two hours. A class in cooking and in carpentry consists of 20 pupils; in sewing, of 56.

Springfield, Mass.—Industrial drawing was introduced in this system in 1870, and manual training not until 1886. The object of the instruction is to give every boy in the senior grammar grade, who desires it, one and one-half hours' practice a week with tools, and to give daily lessons throughout a three years' course, to such high school pupils as elect to take it, in wood and metal work and mechanical drawing. When the high school department shall have been established the pupils of the literary department are to be taken in classes, each of twelve, and to be given one and one-half hours of shop practice and three-fourths of an hour in drawing for five days of the week.

The work is in carpentry and wood turning, under one instructor. The pupils, 126 in all, are divided into classes of twelve. The grammar grade pupils, 62, receive one lesson a week, the high school pupils, 26, receive two shop lessons and one in drawing. There is also a class (divided, perhaps, into several classes) composed of 38 teachers, which receives instruction once a week in the shop. The pupils leave their building to receive the instruction, which is equally divided between carpentry and turning.

The cost of the plant was \$500. The salary of the instructor is \$1,200; the cost of the materials for the year was \$188, of new tools and repairs, \$806, and of incidentals, \$118.

Winchester, Mass.—Industrial drawing was introduced into this system in 1872 and manual training in 1887. At present only sewing and carpentry have been introduced.

For each of the two subjects there is an instructor. Two hundred and fifty boys and girls are instructed in sewing, in lessons of 45 minutes each. In carpentry a class of 15 boys are instructed for one hour, leaving their building. Sewing is taught to the pupils of the fourth, fifth, and sixth grades, carpentry in the eighth and ninth. The sewing classes are either 20 or 40.

The plant cost \$150. The amount paid teachers during the year was \$300, and the cost of material was \$100.

Minneapolis, Minn.—Manual training followed the introduction of industrial drawing in this city after a lapse of nine years. The work is closely connected with the public school system, and is considered as an integral part of it. The work in wood is confined to the high school, while sewing, moulding, and modelling are confined to the lower grades.

There are five instructors and 150 pupils in wood-work, receiving a lesson each school day during the week. The sewing classes receive two lessons weekly, the moulding and modelling classes but one; the classes are composed of from 15 to 20 pupils. Pupils do not leave their building.

No financial statistics are given. The system has a high school course of manual training now confined to wood-working, but metal work is soon to be added. This would have caused the statistics of the wood-working department to have been placed in the tables dealing with manual training schools had they been sufficiently full.

Stillwater, Minn.—In the high school shop the manual training is conducted according to Goss's "Bench Work," and in lower grades according to Thompson's "Manual."

The work in the high school is under one instructor and is given to classes of six, daily for one hour. In lower grades regular teachers give the instruction under the head of "general lessons" once a week. In neither case are pupils required to leave their building.

The cost of introducing was about \$300.

Concord, N. H.—Industrial drawing and manual training appear to have been simultaneously introduced into the city system. The school of carpentry which has been established, other forms to be added soon, will accommodate 100 pupils.

The classes, of ten pupils each, each receive one lesson a week, continuing for two and one-half hours, the pupils leaving the building in which they are instructed in other branches. The work is under one instructor, and is pursued by 100 pupils.

The cost of the outfit for this instruction was \$500. The salary of the teacher was \$700; the cost of the materials used during the year, \$150; of new tools and repairs, \$100; of incidentals, \$50.

In addition to the above statistics furnished by Superintendent Rundlett, the office is in receipt of information respecting the work of school since its foundation given by Mr. Geo. O. Cross, of Concord, to the following effect:

Although the school year has 36 weeks, the average attendance of the pupils at the manual training school is about 64 hours for the year. The school was opened January 31, 1887, with 59 pupils the first week; average attendance for the first 16 weeks, 67. In September, 1888, it opened with 77 and closed with 85. The statistics above are for the year beginning September, 1888.

Hoboken, N. J.—The citizens of Hoboken have raised \$4,079 for "industrial education," thus securing a like amount from the State, in accordance with the law which

provided that any locality raising \$3,000 or more could obtain an equal amount from the State treasury. A sewing teacher has been employed and has under her instruction between six and seven hundred girls. The industrial association, having charge of this matter, intends to provide shops in which two or three trades for boys are to be taught. The shops will be located in a central part of the city, and will be "separate from the public schools," beginning work in October, 1888. At a meeting of the trustees of the industrial association, May 28, the following curriculum was decided upon for the ensuing school year: (1.) To continue the teaching of graded lessons in plain sewing in five public schools, where 600 pupils are now taught. (2.) To teach graded lessons in embroidery, each Saturday, to a class composed of high school pupils. (3.) To teach cooking, in lessons of an hour and a half each day, at 4 p. m., and to select pupils from the public and other schools. (4.) To teach wood-work to the boys of the four high classes of the grammar and other schools, two lessons a week, and to give such pupils lessons in mechanical drawing.

Mont Clair, N. J.—This town was among the first to adopt manual training, having introduced it in 1882, ten years subsequent to the introduction of industrial drawing. The aim is discipline. The instruction is confined to the pupils below the high school. This instruction consists (1) of drawing, cutting geometric forms in pasteboard, (2) clay modelling, (3) use of carpenters' tools, (4) wood-carving, (5) needle-work. Drawing is taught in all grades, and kindergarten occupations below the sixth year.

The shop-work is under one instructor, who has under him 40 boys drawn from the 7th grade and divided into two classes, each class receiving two lessons a week of one hour. The workshop is situated in the attic of the school-house. Cutting geometric forms in pasteboard is taught in the sixth year to 40 pupils, clay modelling to 40 pupils of the seventh year, wood-carving to 35 in the eighth year, needle-work to 115 in the sixth, seventh, and eighth years. Drawing, taught in all grades, is given to 700. Two lessons are given a week, the lesson continuing for one hour. The classes vary in size from 15 to 25. In cutting geometric forms, clay-modelling, and wood-carving there are two classes for each subject; in drawing there are 16 classes, and in sewing 6.

The cost of the outfit for this instruction was \$350. The teacher was paid \$450. The other school expenses cannot be separated from the gross expenditure for the schools.

Paterson, N. J.—"The special characteristics of the system are that the branches are intended to develop thought while training the hand, hand and brain being co-laborers." The training, as also industrial drawing, was introduced in 1887. The branches taught are drawing, mechanical and industrial; wood-working, on the basis of "working drawings"; clay moulding, sewing, and kindergarten work preparatory to all.

There are two instructors in drawing and one for wood-working. The regular teachers teach all else. Drawing is taught in all grades; in the high school mechanical drawing is taken up. Wood-working is followed by the grammar and high school pupils, who are instructed in classes of about 24, the 378 pupils being formed into 16 classes. Sewing is taught in grammar and high school grades. Pupils in the shopwork leave the building to receive their lesson. The pupils who receive manual training in their seats number 7,913.

The cost of the equipment was \$198. The teachers were paid \$940. Materials used during the year cost \$440; new tools and repairs, \$424; rent, \$33; janitor, \$45, and incidentals \$33.

Albany, N. Y.—In October, 1887, the board of education adopted resolutions to the effect that (1) it is expedient and advisable that manual training be added as a part of the course of instruction in our public schools, and (2) for the purpose of giving the new system a fair trial in the most economical manner possible, one of the rooms in the basement of the high school building be fitted up as a wood-working shop, that a competent instructor be employed to teach the boys in attendance at the high school in the proper use of wood-working tools for a period of one year, the total cost not exceeding \$1,500.

Though manual training has just been introduced, industrial drawing has been taught since 1876. The work is in carpentry or wood-working, as it is indifferently called, and is confined to the high school pupils, the shop being in the building.

There is a single instructor giving lessons to 250 boys divided into classes of 24. Two lessons are given a week, continuing for 40 minutes each.

The equipment cost \$600. The teacher is paid \$800 annually. During the year \$175 were expended for materials, \$10 for new tools and repairs, and \$15 for incidentals.

Jamestown, N. Y.—All the pupils in the primary and secondary receive daily instructions in the use of their hands, training them to become skilful in various employments. In the grammar and high schools a course of instruction is pursued by as many young ladies as can be accommodated at present, numbering about 250 during the year. The boys and men receive instruction and learn how to use various implements in the department of mechanic arts. In the printing office both boys and girls learn to set type and to do other kinds of work to be learned therein.

Newburg, N. Y.—Industrial drawing, introduced in 1880, was followed by manual training in 1886. The matters of instructions are carpentry and sewing. The carpentry instruction now extends over a three years' course, but will be continued through a fourth year.

There are two instructors, one for each of the two subjects taught. The eight classes in carpentry are composed of pupils, 12 to 16 in a class, drawn from the seventh, eighth, ninth, and tenth years. Each class receives one lesson a week, continuing for two and a half to three hours. The pupils of these classes leave their building to receive their instruction. In sewing there are 20 classes, composed of from 20 to 25 pupils, each class receiving an hour's instruction during the week. In carpentry there are in all 101 pupils; in sewing, 434. Drawing is taught in all grades.

The cost of the equipment was \$705. During the year \$1,400 was paid: For teachers' salaries, \$479; for materials used, \$479; for new tools and repairs, \$1,080; for incidentals, \$99.

New York, N. Y.—Drawing was introduced in 1875, manual training in February, 1888. The subjects of study are classified as "form and drawing" (cutting and modelling is covered by the word form), wood-working, sewing, and cooking. Form and drawing are taught in all grades, wood-working in the 5 highest grammar grades for males, sewing in the highest three primary grades and 5 lowest grammar grades for females, sewing in the two grammar grades next above the highest sewing grade. Pupils do not leave their building.

In "form and drawing" every class teacher is a manual training teacher also. In wood-working there are two teachers, in sewing four, and in cooking two. In "form and drawing" there are 6,176 pupils, in wood-working 398, in sewing 1,919, in cooking 311.

In "form and drawing" the pupils of the primary grades receive 4 or 5 lessons a week for 20 or 30 minutes weekly; in the grammar grades the number of lessons varies, the time in grades 1 to 5 is 2 hours weekly, in grades 6 to 8, 1½ hours. In wood-working the time given by the grammar grades is 2 hours a week, number of lessons varying. In sewing the primary and grammar grades have 1 lesson of an hour, weekly. In cooking 1 lesson of an hour is given to the grammar grade, as above described.

No specified number is required in any class, but in grammar schools classes must average 35 pupils to a teacher; in primary schools, 50. In "form and drawing" there are 155 classes; in wood-work, 15; sewing, 65; cooking, 10.

The cost of the outfit was \$4,509; for teaching, \$1,491; for materials, \$3,075; for incidentals, \$301.

The reader is referred to the course in the schools of the city in which manual training has been introduced, p. 853.

Cleveland, Ohio.—Statistics of the manual training schools are given on p. 898; information as to the cooking school will be inserted here.

In the fall of 1884 a kitchen garden was opened by several young ladies in the basement of a church. The attendance rapidly increasing the Cleveland Domestic Training Association was formed, and in February, 1887, a cooking class was inaugurated, and, with the permission of the board of education, fifty girls from one of the public schools received lessons at the school. In September, 1887, the cooking department of the association became a regular branch of the Cleveland Manual Training School. "A sum of money was set aside to defray the expenses of teaching a certain number of pupils from the city public schools," and by this arrangement 421 girls each received ten lessons free of cost."

"This enterprise," says the superintendent, "opens up a field of very great interest, second to none in practical importance." The aim is to teach plain cooking. The pupils instructed at the school, practice what they have been taught at home.

Meadville, Pa.—Manual training was introduced into this system about three years ago. In the first and second years of the instruction the work consists of (1) modelling in clay geometric solids and common objects based upon those forms as types; (2) stick-laying to represent common objects in two dimensions; (3) paper folding and paper cutting, etc.; (4) tablet-laying as an introduction to designing; (5) drawing, to show facts represented by sticks, tablets, etc. In the third and succeeding years drawing is taught in its three departments—representation of form, decoration of form or designing, facts of form or the making of working drawings. In making designs pupils are required not only to draw the design but to cut the units from colored paper and to arrange these units so as to form the design in harmonizing colors. Every pupil is encouraged to make every object for which he has a working drawing in any material that may be convenient. The work of construction is done at home.

The instruction in its several forms is given by the regular teachers to the pupils at their desks, all pupils being taught three times a week in lessons of 30 minutes each. A special teacher instructs the regular teachers.

The cost of introducing was \$90; of materials used during the year, \$50. The special teacher received \$350 for his service.

New Brighton, Pa.—Industrial drawing was introduced in 1881, followed in 1886 by manual training. The instruction given is in sewing and wood-working.

There is a teacher for each subject of manual training, while in drawing the instruction is given by the regular teachers. In sewing and wood-working there are two classes for each subject composed of grammar-grade pupils, a class being made up of 25. Each class receives two lessons a week, the lesson continuing for 70 minutes. The pupils do not leave their building.

The cost of introducing plant was \$500; for teachers' salaries \$400 were expended, and for incidentals, materials, etc., \$100.

Pittsburg, Pa.—Industrial drawing was introduced in 1880, but as yet the matter of manual training adopted has been cooking, introduced during the year under review.

The instruction is given to pupils of the sixth year of school life, the pupils leaving their building to receive it. There are five classes each week of 15 each, for ten weeks. The number receiving the training during the year was 300.

The cost of introducing the subject was \$500; the salary of the teacher, \$1,100; of the material used, \$200.

Tidioute, Pa.—Manual training preceded industrial drawing, introduced in 1887, by two years. The subjects taught are drawing, free-hand and mechanical; Sloyd carpentry and lathe work; forging; floriculture; and sewing.

For carpentry, wood turning, mechanical drawing, and sewing there are special teachers. The three carpentry classes are composed of ten each, receiving three lessons of an hour each week, the pupils leaving their building. In wood turning there are two classes of four pupils each, instructed three times a week for one hour. In sewing there are five classes of twenty each, instructed twice a week for one hour. In mechanical drawing there are three classes of ten each, instructed twice a week for one hour. Free-hand drawing and floriculture are taught in all grades. Lathe work and mechanical drawing is confined to the high school grade, and carpentry and sewing to the intermediate and grammar grades.

The cost of the equipment was about \$2,000; for instructors during the year, \$900; for materials, \$200; for new tools and repairs, \$500; for incidentals, \$50.

Knoxville, Tenn.—Manual training and industrial drawing have just been introduced. The features are a kitchengarden, carpenter shop, printing shop, a cooking and a sewing school.

For carpentry, printing, and sewing there is 1 teacher respectively; for cooking and house-work, 2. In carpentry there are 50 pupils, in printing 50, in sewing 105, and in cooking and house-work the same number. Two hours each week are devoted to these studies, which are given to pupils of the first, fifth, and sixth grades, they not leaving their building. About 25 form a class, and there are two classes in each subject.

The cost of teachers during the year was \$1,447; of materials, \$115; of tools and repairs, \$199, and incidentals, \$361.

It is contemplated to extend the training throughout the system.

Eau Claire, Wis.—Industrial drawing was introduced in 1879 and manual training in 1884. The features of the course are carpentry work, blacksmithing, and wood turning. Principal McGregor characterizes the work as purely educational, nothing in the shape of trade teaching being attempted.

Each subject has an instructor. In carpentry there are 46 pupils taught in three classes; in blacksmithing there are 12 pupils forming two classes; and in wood-turning there are 8 pupils forming two classes. Each class receives two lessons a week, each lesson running for one and a half hours. The work is voluntary and pupils are admitted from the grammar or high school grades, and pursue the course in the following order: Carpentry, blacksmithing, and wood turning. They, of course, are obliged to leave their building to receive the instruction.

The cost of introduction was \$325; during the year \$720 was paid for teachers, \$30 for material, \$10 for new tools, and repairs and incidentals, \$5.

La Crosse, Wis.—Industrial drawing was introduced in 1884, manual training in 1886. The instruction takes the form of clay modelling, cutting and folding paper into various geometric forms, and making simple articles in wood. The latter work is optional, however. All the schools below the high school have training in the several subjects above mentioned.

B.—STATISTICS OF MANUAL TRAINING SCHOOLS.

THE IMPERIAL TECHNICAL SCHOOL OF MOSCOW.

"When the mariner," says Mr. Webster, "has been tossed for many days in thick weather and in an unknown sea, he naturally avails himself of the first pause in the storm, the earliest glance of the sun, to take his latitude and ascertain how far the elements have driven him from his true course." Before "imitating this prudence," and referring to the point from which the Russian system departed to proselyte America, let us hope that our endeavor will not be disposed of by saying, in the language of one of

Molière's physicians, "That was so; but we have changed all that, and now practice medicine in an entirely different fashion." The claim as to the educative character of the instruction at the manual training school is implicitly respected; indeed, how would it be possible to go wrong when Professor Woodward, in his "Manual Training School," expressly tells us that "Mr. Runkle looked deeper into the problem than had Della-Vos; he saw that shop instruction, essential to a mechanical engineer, had elements of value in a general education."

"This school, [the one of which we are speaking]," says Professor Runkle, in 1877, "is entitled to the leading place in any list of schools given mechanic art education, on account of the fact that it was the first to put this instruction upon a strictly scientific and educational basis—first, by separating the laboratories or instruction shops from the manufacturing establishment, and second, by working out a systematic scheme of instruction in each of the underlying arts."

The same authority describes the school under four heads—Organization, Administration, Method of Instruction in the Mechanic Arts, School Workshops. With the administration we are not concerned. The method of instruction, which is a quotation from a description by Director Della-Vos, has been given for the most part on page 829, and we will, therefore, devote our attention exclusively to what is required of the student before he is admitted, and the character and purpose of the instruction of the school, both of which constitute the head "Organization."

The old school of arts and trades founded in 1830 having been reorganized in 1868, the date of this school's rank as the leading polytechnic school of Europe began then. The course of instruction is of six years, three of which are given to theory (the instruction being the same as in the leading polytechnic schools of Europe) and practice—free-hand and mechanical drawing, the art of turning in wood and metals, joinery and pattern-making, fitting, locksmithing, forging, moulding, and casting. For these practical studies special shops have been provided with all the pedagogical objects necessary to demonstrate the fundamental principles of handwork in the mechanic arts.

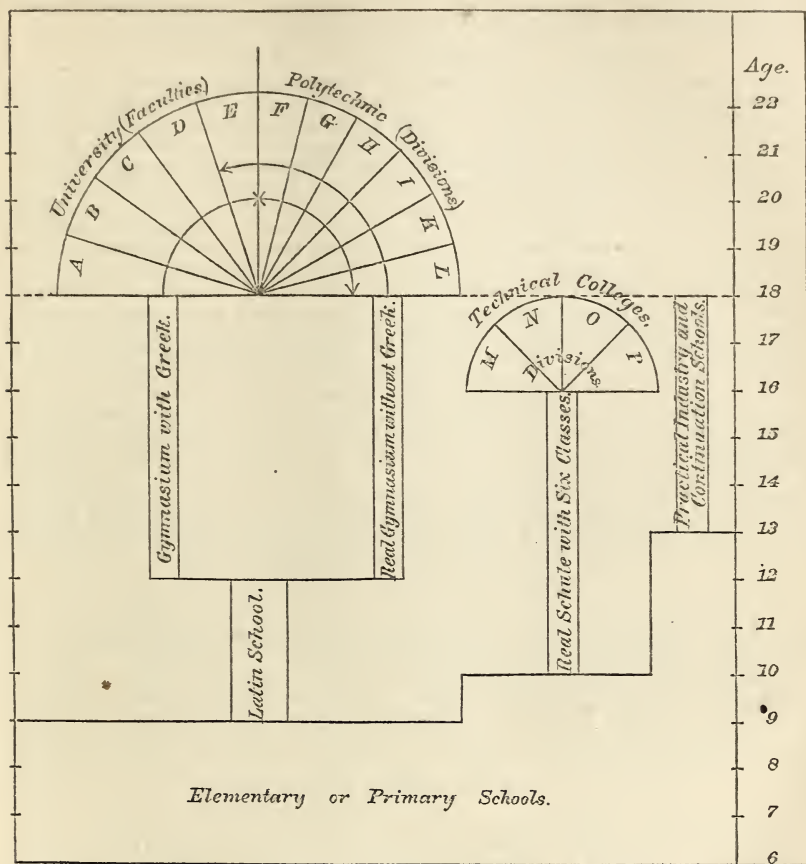
The question naturally occurs, What is the intellectual maturity (the literary maturity, as the advocates of manual training might prefer to say) of the candidate for admission? Before an applicant is admitted he must present presumptive evidence of qualification by presenting one of the following certificates: (1) A certificate of the seventh (the highest) class of a gymnasium, a college whose instruction is distinctively Latin and Greek; or (2) a certificate of having completed a course in a realschule of the first class, about equal to our Latin-scientific course in an ordinary college. Before being definitely admitted, however, the applicant must pass a test examination in the following subjects: Russian language; composition, on a theme chosen "by the professor;" mathematics, arithmetical, algebra, elementary analysis, geometry, and plane trigonometry, physics, and drawing. If he has neither of the certificates of academic grade he must pass an examination on all the studies of a realschule of the first class. In brief, the applicant, before he can enter the Russian school, must have undergone a course of literary training perhaps equal to the course of an ordinary American college.¹ The following diagram,

¹ The Russian "Gymnasium" (and "Gymnasium without Greek") has the aim, says the law of July 30, 1871, to give its pupils, on the one hand, a general education, and on the other to prepare them for [one of the faculties that compose] the "university" [of Continental Europe], or for other "higher institutions." The course consisted [sec. 2 of the law of 1871] of seven classes, six of which were of a year each and the seventh of two years. In 1877 a new programme was established with eight classes, but it is thought that Professor Runkle refers to the 1864 programme as modified in 1871. This programme reads as follows:

Studies.	Class.							Lessons.	Hours.
	I.	II.	III.	IV.	V.	VI.	VII.		
Religion.....	2	2	2	2	2	2	2	14	17.5
Russian.....	4	4	3	4	3	3	3	24	30
Latin.....	4	5	5	5	5	5	5	34	42.5
Greek.....			3	3	6	6	6	24	30
French or German.....	3	3	2	3	3	3	2	19	23.75
Mathematics.....	3	3	3	3	3	3	4	22	27.5
History.....			2	3	3	3	3	14	17.5
Geography.....	2	2	2	2				8	10
Natural history.....	2	2	2					6	7.5
Physics and cosmography.....					2	2	2	6	7.5
Writing.....	4	4	3	2				13	16.25
Total lessons and time.....	24	25	27	27	27	27	27	184	230

The Gymnasium without Greek divided the time thus gained between Latin, French, and German.

taken from a work by the competent hand of Sir Philip Magnus¹ and published by the New York Industrial Education Association, will illustrate the meaning of this better than description:



UNIVERSITY FACULTIES.

- A—Theology.
- B—Jurisprudence.
- C—Cameralistic.
- D—Medicine.
- E—Philosophy.

POLYTECHNIC DIVISIONS.

- F—General.
- G—Engineering.
- H—Architecture.
- I—Mechanics.
- K—Chemistry.
- L—Agriculture.

TECHNICAL COLLEGE DIVISIONS.

- M—Mechanics.
- N—Chemistry.
- O—Building.
- P—Commerce.

Now, to what does this course lead? What is the second course of three years? "The work of the second three years," says Professor Runkle, "embraces three sections of students, mechanical engineers. There is a fourth section, called *praticiens*, formed exclusively of those who show exceptional aptitude for practical work, but whose theoretical studies are insufficient to pass them into the engineering sections. They take much fuller shop courses, which they complete in three years.

In addition to the school shops, "the school possesses large manufacturing works with all the adjuncts of a first-class establishment. These works employ salaried workmen, and execute orders annually to the amount of a hundred and fifty to two hundred thousand francs. Still, the main aim of the work is to furnish students an example of the conditions of industrial work in all its practical details."

¹ Education in Bavaria. Published by the New York Industrial Association as one of a series of monographs in which living issues are not only discussed, but discussed in a manner worthy of their importance.

Such is the first course of three years of the Moscow institution, and such its environment, we think, that it will not be disputed that it is merely a scientifically arranged preparatory school to the upper course, and that its students have considerable literary acquirements before beginning it. But before considering our manual training schools we will consider the secondary professional schools of Germany and France.

THE SPECIAL PROFESSIONAL SCHOOLS OF GERMANY.

"In Germany," says Inspector General Jost, in a report to his chief, the French minister of public instruction,¹ "the greater number of professional schools have a special character, as the name, *Gewerbliche Fachschulen* (special professional schools), by which, as a class, they are known, indicates. In these schools the object, speaking generally, is to give not only a general theoretical and practical course of instruction to their students, a certain aptitude in all the manual professions, but to make specialists of them by instructing them in the predominating industry or industries of the locality in which the particular school is situated." At Cologne, for instance, an industrial centre and large city, the students are prepared for the professions that relate to building construction, furnishing, ornamenting, etc.; at Bochum, a town situated among the mines of the Berg country, metallurgists and superintendents of mines are educated; at Remscheid, a centre of small iron and steelware industries, it is sought to make expert mechanics in articles of hardware; at Höhr-Grenzhausen, a region of pottery manufacture, a school of ceramics has been established. "Speaking generally," continues M. Jost, "it is proper to say that the young man leaves the elementary schools when fourteen years of age [before which age he cannot gain admittance into the professional school]; that he works during two years in a shop either before or after his course at the professional school, in which he remains also for two years; so that he is not a workman until his eighteenth year, when he is sufficiently mature and advanced to complete his technical education by himself."

It is very observable how business-like these methods are. The locality has a specific industry and a school whose specific object is to educate workmen to follow that industry; while the school work is either immediately preceded or followed by real work. The field of the apprentice's activity is narrowed to the subject in hand.

APPRENTICE SCHOOLS OF FRANCE.

We have already spoken of the work done in the public schools of France, upper and lower grades. Apprenticeschools, distinctively known as such, will now be noticed. Consul Schoenhop's very recent work will again be used.

"A number of schools have been created whose object is to supply boys leaving the public schools with a higher elementary education and at the same time give them instruction in special branches of manufacture and industrial art. This has become necessary in consequence of the modern development of industries, whose minute subdivision into special branches and departments make it more and more difficult for a boy to become more than a maker of a part of anything, seldom getting a notion of the whole finished article in any special trade." * * * One of the best of this kind that I have had the pleasure of visiting is The *École Municipale Diderot*, Boulevard de la Villette.

"This school was created in 1873. The director, M. Jules Bocquet, a civil engineer, has also been a pioneer in this branch of instruction, and has devoted most of his life to the propagation of his views upon technical education. * * * The pupils are graduates from the common schools, and belong mostly to the working classes. The best proof of the high value of the school and the high credit which it obtains is that the municipality has decided to establish several schools of the same character in Paris.

"The course of instruction in this school occupies three years, and is divided into theoretical and practical part. The theoretical part of instruction comprises for the—

"First year.—French grammar, orthography, arithmetic, geometry, elements of general chemistry, elements of physics, general properties of bodies, technology, materials, their properties and uses; hand tools; general history up to modern times; geography, commercial and industrial; geometrical and ordinary drawing.

"Second year comprises French composition, arithmetic, geometry, measure of surfaces, surveying, and levelling, industrial chemistry, metallurgy, industrial physics, technology; the different organic elements of machines and process of their manufacture, elements of machine construction, history, geography, commercial and industrial; drawing from models and machine drawings from sketches taken from the professor's demonstration in the recitation-room, and geometrical drawing.

"Third year.—Reports on observations made in workshops and factories visited; mechanics, algebra, trigonometry, elements of geometry and space, physics, chemistry, technology, description of machines, steam and other motors, resistance of materials, designing of tools, machine sketches at sight from models and black-board illustrations; geometrical drawing, accounting, book-keeping, and political economy.

"The theoretical studies take four hours each day for the first two years. The workshop practice, however, is six hours a day for the first two years, and eight hours for

¹ Notes sur quelques écoles professionnelles d'Allemagne. Mémoires et documents scolaires, publiés par le Musée Pédagogique, Fascicule No. 14. Paris, 1887.

the third year, with pauses between for meals and recreation. Besides this, there is a military drill every Sunday and Thursday morning from 8 until 10.30 o'clock.

"Workshop practice proper.—The pupils must have passed their thirteenth year when they are admitted to the apprentice school and be in possession of a certificate of primary education. During the first year the apprentices pass in succession through the various branches carried on in the establishment. They make a trial of each of them in order to become acquainted with the general character of manual work before adopting the particular trade best adapted to the temperament and aptitudes of each individual. After the first trial year the pupil, guided by the director of the workshop, chooses the trade he will devote himself to during his apprenticeship, in which the next two years are passed.

"The workshop practice is divided into the following branches:

"Metals, blacksmithing, turning, fitting, locksmithing, and philosophical instrument making.

"Modelling in clay.

"Wood-work, joiners' work, wood-turning, and model-making."

"First year.—The first year's practice is given to all boys alike, and they work their way through the different branches gradually, so as to find out their particular fitness for one or the other trade.

"Second and third years.—Wood-work, furniture-making and model-making, modelling, iron-work, forging of machine pieces of more complicated nature; setting and mounting machines and tools; small machinery, blacksmithing and artistic-hammered iron-work. Philosophical-instrument making is conducted in a special apprentice school."

THE MANUAL TRAINING SCHOOL.

Nothing is more frequently affirmed of the manual training school on the American system than the phrase "We do not teach a trade," to which is not infrequently added, "but the underlying principles of all trades." By consulting the course of study of the American manual training school given below,¹ it will be seen that though the technical courses are similar the literary character of the programme of the American school is, to say the most, at the end what the Russian school requires at the beginning of the course; and that the American course is a hybrid, being the English studies of a high school and the preparatory technical course of the Russian school. But it will be observed that the French apprentice school, distinctively known as such, also has a preparatory course, a year of observation, before the pupil selects a trade to follow for the two remaining years. In which of these acceptations is the phrase "we do not teach a trade" to be taken? Does it mean a preparation for a higher course as at Moscow, or a three years' course of observation, or does it turn out the boy, unlike the public schools, ready to make a living though no trade has been taught him? In short, what is the positive of this nega-

¹ COURSE OF STUDY OF THE ST. LOUIS MANUAL TRAINING SCHOOL extends through three years. Except in the literary work no choice of subjects is allowed. All must be taken in regular order as laid down below:

First year.

Arithmetic completed; algebra to equations.

English language, its structure and use; study of selected pieces; history of the United States. Latin grammar and reader may be taken in place of English.

All students have English composition once a week.

Huxley's Introduction to Science; physical geography; botany.

Drawing, mechanical and free-hand; penmanship.

Carpentry and joinery; wood-carving; wood-turning.

Second year.

Algebra through quadratics; geometry begun.

Natural philosophy; experimental work in the physical laboratory.

English composition and literature; rhetoric; English history.

Latin (Cæsar) may be taken in the place of English and history.

Drawing: Line-shading and tinting; machines; development of surfaces, free-hand detail drawing, isometric projections.

Forging: Drawing, upsetting, bending, punching, welding, tempering; pattern-making, moulding, soldering.

Third year.

Geometry, plane and solid; mensuration.

English composition and literature; history; elementary political economy, and civics; graduation essay.

French may be taken in place of English and history, or in the place of science study.

Physiology; elements of chemistry. Students who have taken Latin, and who intend to enter the polytechnic school after completing the course in this school, take history and rhetoric in place of physiology and chemistry.

Book-keeping.

Drawing: Brush-shading, shadows, geometrical and architectural. An elaborate finished drawing closes the course.

Work in the machine-shop: Bench work and fitting, turning, drilling, planing, screw-cutting, etc. The making of a project.

tive definition, which, when taken in connection with the shop work and the expression "the underlying principles of all trades," still leaves a decided appearance that the great purpose of these schools is to make mechanics by a process, *mutatis mutandis*, similar to that by which good scholars are formed? The reader is referred for an answer to the statements made by their directors, which follow in the order in which the schools were established.

Manual Training School of Washington University.—"Its motto is, 'The cultured mind, the skilful hand.' It is not assumed that every boy who enters this school is to be a mechanic. Some will find that they have no taste for manual arts and will turn into other paths—law, medicine, or literature. Some who develop both natural skill and strong intellectual powers will push on through the polytechnic school into the realms of professional life as engineers and scientists. Others will find their greatest usefulness as well as highest happiness in some branch of mechanical work into which they will readily step when they leave school. All will gain intellectually and morally by their experience in contact with *things*. The grand result will be an increasing interest in manufacturing pursuits, more intelligent mechanics, more successful manufacturers, better lawyers, more skilful physicians, and more useful citizens."

School of Practical Mechanics and Design, Minneapolis, Minn.—"The instruction given is based on the 'Russian system,' in which the leading idea is to teach principles rather than to produce objects of commercial value. It is believed that the greatest progress can be made in a given time with this method, as the student proceeds, by a carefully-planned series of exercises, from the simplest to the most difficult operations, learning the processes, but avoiding the repetition of the ordinary shop. So far as is consistent with this system the work is adapted to parts of some machine or structure in common use, and after finishing the exercises referred to above, the class will build some complete machine or structure, as a review and application of the preceding work."

Manual Training Department of the College of the City of New York.—"The object of the entire course is to furnish the student with such manual skill and such a general knowledge of the tools and methods of working in the arts in which wood and metal are employed as will give him an intelligent comprehension of any mechanical operation or device, and enable him, with proper study and practice, to master any handicraft or mechanical profession to which his attention may be directed in after-life."

Baltimore Manual Training School.—"The school does not teach trades. Its aim is more comprehensive; it lays the foundation for many trades, and at the same time recognizes the value of intellectual discipline. It is not assumed that every boy who enters this school will be a mechanic. * * * This school differs from the city college in omitting from its required studies foreign and ancient languages, in giving prominence to mechanical drawing, and particularly in affording scientific instruction and actual practice in the care and use of tools."

Chicago Manual Training School.—"The special feature of the school in which it differs from the ordinary high school is its manual training. Notwithstanding the prominence given to this part of its course, experience shows that its mathematical and scientific work need not be inferior to that of the best high schools. Education, not manufacture, is the idea underlying the manual training. Consequently, the material products of the shops consist chiefly of exercises designed to develop skill in the use of tools. The educational value of construction is also recognized, and the course embraces a number of finished articles."

Hebrew Technical Institute.—"The school pursues educational methods. Its object is, however, specific, and its promoters hope that all its graduates will enter into industrial avocations. This is the difference between this school and a trade school. A trade school is one where some special branch is taught—a school where cigar-making or plumbing or some special industry is taught. Surely ill-fed boys of twelve and a half or thirteen who never saw a hammer or a chisel are not fit to be set at these trades."

* * * Let them, however, go to a school, not where a trade is taught, but where they are taught to use tools and to draw and to continue their ordinary education, and when they get to be fifteen or so, and then they are not too old to enter life, what have they learned? * * * They have the foundation laid stout and deep; the foundations of intelligence and skill, for they know the principles not of one trade but the principles that underlie many trades."

Manual Training Department of Tulane University.—"Throughout the high school the attempt will be made towards a normal adjustment of that physical, mental, and moral training which is so much praised and so little practiced. The hand, the eye, and the muscle are trained by the handwork in wood and iron, which is now admitted to be the true basis of mechanical education, and is claimed to confer so many benefits. * * * The purpose throughout is *training*. * * * But we do not expect or desire manual training to supersede, or be substituted for, other well-established courses of training sanctioned by the experience of wise and conservative men. Hence the manual train-

ing school is not a separate department of Tulane University, but the laboratory in wood and iron where instruction and practice render the student quick, observant, and accurate with the eye; ready, skilful, and exact with the hand, and able to think in things, as well as about them, and to execute as well as describe."

This school is conducted in the Swedish system. See page 848.

Philadelphia Manual Training School.—"In the Philadelphia Manual Training School are taught the principles applied in the various arts and trades, the principles of pure science, of political economy, of social science, of the mother tongue and its uses, and the lessons of history.

"The school trains boys from 14 to 18 years of age in actual practice to become familiar with elementary notions, and to acquire substantial knowledge of the nature of things and of the character of human society and the rights and duties of men. There are many trades and occupations, but the principles underlying the successful pursuit of any of them are common to the greater number. A manual training school is not a trade school; but it is a school wherein the principles of all trades and occupations are taught. The object of the school, therefore, is the education of all the faculties. The whole boy is put to school; he learns to do by doing. * * * It is not to be supposed that pupils enter the school merely for the purpose of becoming mechanics. * * * Manual training is a means of developing to a high degree certain faculties—such as observation and judgment."

Haish Manual Training School.—"It is not assumed that every pupil who enters the manual training school is to be a mechanic. * * * All the shop work will be disciplinary. Special trades will not be taught, nor will articles be manufactured for sale. The scope of a single trade is too narrow for educational purposes. Manual education should be as broad and liberal as intellectual. If the object of the shop is education, a student should be allowed to discontinue any task or process the moment he has learned to do it well. * * * In manual education the desired end is the acquirement of skill in the use of tools and materials, and not the production of specific articles; hence, we abstract all the mechanical processes and manual arts and typical tools of the trades and occupations of men, arrange a systematic course of instruction in the same, and then incorporate it in our system of education. Thus, with teaching any one trade, we teach the essential mechanical principles of all."

Cleveland Manual Training School.—"No one," says the city superintendent, "should be misled by the term manual training. Many suppose the object to be simply training the hand—far from it. The training of the mind is as much an essential of this school as it is in the high, grammar, or primary schools. In this the ability of the mind to conceive, plan, and carry out a measure is shown through dexterity in execution. The solutions of problems in mechanical drawing; the reduction of a piece of lumber from its rough into a perfect model; the hammering of a crude piece of iron into a definite shape and size; the adjustment of the several parts of a piece of mechanism, more or less complicated; the study of a complete machine of any kind with reference to the discovery of the general design; the adaptability and specific uses of its various parts, its points of weakness, etc., all this requires the exercise of the mental faculties just as clearly, persistently, and profitably as is required in the study of language, mathematics, or science. It is not proposed that this shall take the place of anything else. It affords a peculiar exercise of the mental faculties which no other study affords or can afford.

"Neither is it intended that any trade shall be taught, as is clearly shown in the course pursued."

The Technical School of Cincinnati.—"The course in this school requires of its students as much application and continuous honest effort as does the course in any academic institution of equal rank. The advantage claimed for its hand training is that it requires thinking. The work is never so long continued that it becomes mechanical or automatic, but is changed so frequently and is varied in its nature so that it requires as much mental effort, although of a different kind, as is required in the study of mathematics or of languages. To guide the hand in its ever varying tasks requires the continuous directive effort of the mind, and results in after-reflection on the degree of success or failure in the work attempted, of disappointment and of plans for overcoming the opposing obstacles, and the tangible results are to show when success at last crowns the efforts of the genuine student. The result of the thinking, the planning, the final overcoming of the difficulties, and the production of the finished project is education in its truest sense, the awakening of dormant faculties, the development of the latent capabilities."

The Department of Mechanic Arts of Pratt Institute.—"It is now generally recognized that manual training is an important and necessary adjunct to the education of the schools, and that mind and eye and hand must together be trained in order to secure symmetrical development. Manual training aims at the broadest, most liberal education. While developing and strengthening the physical powers, it also renders more active and

acute the intellectual facilities, thus enabling the pupil to acquire with greater readiness and to use more advantageously the literary education which should go hand and hand in manual training. * * * The twofold aim of the institute is based on an appreciation of the dignity as well as the value of intelligent handicraft and skilled manual labor. It endeavors to give opportunities for complete and harmonious education, seeking at the same time to establish a system of instruction whereby habits of thrift may be inculcated, to develop those qualities which produce a spirit of self-reliance, and to teach that personal character is of greater consequence than material productions. It offers its advantages only to those who propose to do their own part earnestly and well. Its aim is to aid those who are willing to aid themselves."

CHARACTERISTICS OF AMERICAN MANUAL TRAINING SCHOOLS AND THEIR STATISTICS
FOR 1887-88.

The newness of these schools as a class, and their rapidly increasing number, have caused us to spread before the reader not only their statistics of attendance, but a view of other features not of a numerical nature.

In doing this, condensation has been sought by using the tabular form of presentation, distributing the whole field into departments and devoting a table to each department. This manner of treatment may sacrifice the individuality of a school, but it will promote the comprehension of them all as a class. Whatever is objectionable in it will be rectified in future reports.

Although the class is distinguished by having a high school and a work shop department, it sometimes happens that these are not in the same building. Again, some public schools of this class are completely independent schools, there being another public school in the same system, where the student may pursue the usual secondary course of instruction; while in other systems the work shop department is a division of the single high school that it possesses. These and other minor distinctions make it somewhat difficult to be plain and yet to speak briefly, the only literary virtues open to the statistician, whose subject-matter of discourse is not chosen by poet or novelist, either "to point a moral or adorn a tale."

TABLE 74.—*Manual Training Schools, their Officers and Connection.*

Place.	Name.	Year of Opening.	Director.	Connection.
1	2	3	4	5
1 Denver, Colo.....	Huish Manual Training School.....	1885	H. F. A. Kleinschmidt.....	Department of the Colo. Seminary of the Colo. Conference of the Meth. E. Church.
2 Chicago, Ill.....	Chicago Manual Training School.....	1884	Henry H. Belford.....	Owned by the Commercial Club of Chicago.
3 Chicago, Ill.....	Manual Training Department of the Chicago High School.	1886	Herman Hanstein.....	Part of the Public School System of Chicago.
4 New Orleans, La.....	Manual Training Department of Tulane University.	1884	John M. Ordway.....	Part of Tulane University.
5 Baltimore, Md.....	Baltimore Manual Training School.....	1884	John D. Ford, U. S. N.....	Part of Public School System of Baltimore.
6 McDough, Md.....	McDonogh Institute.....	1873	William Allan.....	Belongs to the city of Baltimore; but is not a part of the Public School System.
7 Minneapolis, Minn.....	School of Practical Mechanics and Design.....	1883	William A. Pike.....	A department of the College of Medicine Arts of the State University.
8 St. Louis, Mo.....	Manual Training School of Washington University.	1880	C. M. Woodward.....	A separate department of the University, but of lower grade.
9 Omaha, Nebr.....	Manual Training Department of the High School.	1885	Albert H. Bumann.....	A department of the Public High School.
10 Brooklyn, N. Y.....	Department of Mechanic Arts of Pratt Institute.	1887	.....	A department of Pratt Institute, established to promote manual education.
11 New York, N. Y.....	Hebrew Technical Institute.....	1884	H. M. Leipziger.....	Sustained by subscriptions from associations and individuals.
12 New York, N. Y.....	Manual Training Department of the College of the City of New York.	1883	Alexander S. Webb, president of the college.	A department of the College of the City of New York.
13 Cincinnati, Ohio.....	The Technical School of Cincinnati.....	1886	L. R. Klemm.....	Under the auspices of the Technical School Association.
14 Cleveland, Ohio.....	The Cleveland Manual Training School.....	1886	Newton M. Anderson.....	Property and apparatus owned by a private corporation, the running expenses paid by the city.
15 Toledo, Ohio.....	Manual Training School.....	1884	George S. Mills.....	Connected with City High School, which gives the literary instruction.
16 Philadelphia, Pa.....	Manual Training Department of Girard College.	1882	T. Mason Mitchell.....	A department of Girard College.
17 Philadelphia, Pa.....	Philadelphia Manual Training School.....	1885	William L. Sayre.....	Stands in the same relation to the Public School System as the High School does.
18 Crozet, Va.....	The Miller Manual Labor School of Albemarle.....	1878	C. E. Yawter.....	Endowed, self-sustaining, and isolated.

Remarks on Table 74.

It is noticeable that the institutions given in the preceding table are for the most part situated in the Northern or Western States.

As to their connection or source of support these schools may be divided into three classes: Those established by private individuals and supported by endowment or otherwise, with or without tuition; those established by societies and supported by tuition, the society meeting deficiencies; and those established and supported by municipalities or other public authority.

The establishment of an institution of learning by wealthy and philanthropic individuals, or by religious bodies, is far from being unknown here; but the activity of associations in giving concrete expression to their views by founding and protecting institutions which are to prove the practicability of those views, has not been so common. The distinguished origin of the Chicago Manual Training School was given in the report for 1886-87 as springing from the action taken by the Commercial Club of Chicago, and from similar action by the Order of Cincinnati has arisen the Technical School of Cincinnati.¹ The Cleveland Manual Training School is also the result of concerted action, it having been established by a joint stock company formed for the purpose; the running expenses of this school, however, are paid by the city of Cleveland. The Hebrew Technical Institute, of New York City, is another evidence of this activity of associations in promoting manual training.

At Baltimore and Philadelphia complete educational institutions have been established as part of the public school system, remarkable for their completeness of equipment and thoroughness of instruction. At New York City and at Toledo, where in each instance the school is apparently rather a department than a school complete in itself, the school established is also a part of the public system. In all these cities there are also purely literary schools of academic grade, and it will thus appear that there is an option presented to the student. If he wishes to follow an industrial occupation it is certainly more profitable for him to attend the manual training school, and to this obvious reason the advocates of manual training would add more profitable in an educational sense.

At Omaha, Minneapolis, and Chicago, where the schools are departments of the high school of the respective cities, the course has not yet been fully introduced.

Of the several schools which are parts of a university system, it is to be remarked of the St. Louis school that its connection is so loose as to practically amount to independence. The McDonogh Institute and Miller Manual Labor Schools, both well endowed, are included in the table. The latter certainly belongs in this class of schools despite its name and object, which appear to indicate more practical aims than other schools on the Russian type; in a word, the object appears to be to turn out graduates many of whom can "do as good work as the average person does upon the completion of an apprenticeship and know far more of the principles of machinery," etc.

To characterize these schools the phrase "manual training" is used with but few exceptions. In Cincinnati the title adopted is Technological School, while for the manual training department of the State University at Minneapolis the phrase Practical Mechanics and Design has lately been substituted for Artisans' Training School, by which until then it had been designated.

In examining the educational features of these schools there are certain characteristics of their respective curriculums which are common. They require an equal degree of scholarship and physical maturity for admittance, they all give instruction in wood-working, forging, and machine-shop work by a graded course, they all give instruction in drawing and in what may be said to be the "English branches" of an academic course. The Office considers that these, together with the general object of educating the pupils rather than teaching them trades, are the foundation of the classification which has been made.

New schools.—The only new school of the class under review is that known as the Department of Mechanic Arts of Pratt Institute of Brooklyn, unless the Manual Training School of Springfield, Mass., may be said to be new in having moved into new quarters near the high school, an additional instance of the determination with which this training is being made a co-ordinate part of public secondary education.²

The magnificence of the gift and the comprehensiveness of the idea which the donor, Charles Pratt, esq., had in mind when establishing the institution which has received

¹ The Commercial Club of Cincinnati took formal action as a body on the subject of this school in November, 1887 (a number of its members had been interested from the first), and has since borne nearly half the expense of the school.

² It is to be regretted that the statistics of the Springfield School arrived too late for insertion in the tables. In making the course, which has manual training as a component part, Superintendent Balliet informs us that the scientific course of the high school served as a stock upon which the manual course was engrafted. See page 882.

his name will be spoken of somewhat fully in the following pages; it is only required here to give the characteristics of the school or department where instruction is given on the "Russian system." In this school it is designed to accommodate three classes of pupils: Members of the regular three years' course who, in connection with their literary work, are instructed in wood and iron working; pupils in other schools who wish to supplement their studies with some kind of manual work, and finally persons who are employed during the day, but, desiring to learn a mechanic trade or to perfect themselves in the trade in which they are engaged, wish to join the evening classes. The buildings of the institute as a whole may be succinctly described as immense. The main structure on Ryerson street, six stories high, is not devoid of architectural effect, but the shops in the rear on Grand avenue, covering a ground space of 144 by 95 feet, are built with the utmost simplicity, the straight lines so necessary when it is a question of inclosing the greatest space with a given amount of wall and roof, being only broken by the massive chimney which towers high above the fourth story of the buildings containing the shops, an unknown appendage to an educational establishment until recent years. The shop buildings are of three elevations: The main building of four stories, 102 by 37, whose three upper stories are to be used as laboratories, class rooms, etc.; the forge and the foundry rooms, 70 by 60, one story, with ventilating skylights, and a two-story building, 91 by 37, containing the metal-working and wood-working shops on the first and second floors respectively. The building for the trade department is described on page 925.

At Springfield the academic studies are, as usual with this class of institutions, higher mathematics, physics, a foreign language, English, and history. Drawing begins in the "First high school year" with the use of instruments and closes in the third year with brush shading, pen and ink sketching, and finished drawings with full details. In the shop the first year is in wood-working, for which the pupil has been prepared in the grammar grade; forging, moulding, etc., follows of course in the second year, and chipping and filing, planing and drilling, and machine construction complete the course.

A junior or preparatory department was established at the Baltimore school in September, boys from the sixth grade of a grammar school being admitted. One hour a day is devoted to manual work, and forty-five minutes to freehand drawing, the rest of the school day being devoted to the usual school work of their grade. There were 114 boys in this department, December, 1887. They were arranged in three classes denominated E, F, and G, respectively. The course is of two years. In the first year ten lessons in wood-work and ten in sheet metal working are given, the wood-working being the joining of two pieces, and the metal working soldering and making sample tin vessels. In the second year the use of the bracket saw and the foot lathe is taught, and the art of tinning and of joining different metals.

TABLE 75.—*Manual Training-Schools, Controlling Bodies, and Method of their Appointment.*

Name of School. [Abbreviated.]	Controlling Body.				Officer Directing Work.	
	Name.	Member- ship.	Term.	By whom Appointed.	Title.	By whom Appointed.
1	1	3	4	5	6	7
1 Halsh School	Trustees of Colorado Seminary.	28	<i>Years.</i> 4	Annual Conference M. E. Church.....	Principal.....	.....
2 Chicago School.....	Board of Trustees	9	9	Chicago M. T. School Association	Director	Board of Trustees.
3 Chicago High School Depart- ment.	Board of Education	15	3	Mayor, and confirmed by council.....	Principal.....	.....
4 Tulane University Department..	Administrators of Tu- lane Fund.	20	<i>a</i> Life.....	Self-perpetuating	Director	Administrators of Fund.
5 Baltimore School.....	Commissioners of Public Schools.	22	4	City councils.....	Principal.....	Navy Department, U. S.
6 McDonogh Institution	Board of Trustees	7	Life.....	Self-perpetuating	do	Board of Trustees.
7 School of Practical Mechanics and Design	University Board of Re- gents.	10	3	Governor of State	Director	University Board of Re- gents.
8 St. Louis School	Managing Committee	15	Life.....	University Board	do	University Board.
9 Omaha High School Department..	Board of Education	5	3	Elected by people	do	Board of Education.
10 Pratt Institute	Trustees	15	3	By founder, Charles Pratt, esq.	Director	Board of Trustees.
11 Hebrew Technical Institute.....	Board of Trustees	22	3	Elected by members of Society	Director	Board of Trustees.
12 N. Y. City College Department..	College Trustees	13	1	Mayor.....	Principal.....	Board of Directors.
13 Cincinnati Technical School.....	Board of Directors	13	1	Association	do	do.
14 Cleveland School .....	.....do	15	1	8 by a corporation; 7 by City Board of Education.....	do	Board of Trustees.
15 Toledo School	Board of Trustees	13	5	City council.....	do	Board of Trustees.
16 Girard College Department.....	Board of Directors	15	3	Judges Philadelphia courts	Superintendent ..	Board of Directors.
17 Philadelphia School	Board of Education	31	3	Visitors by judge; judge by Legis- lature.....	Principal.....	Board of Education.
18 Miller Manual Labor School.....	Board. { County judge..... Visitors.....	3	{ Visitors...1 Judge....6		Superintendent...	Visitors.

a 3 are *ex officio*.

Remarks on Table 75.

The manner of conducting these institutions is no exception to the usual methods adopted for governing public and private institutions. When the school is a part of the public school system it is under the control of the city school authorities for the common schools; when the school is a private establishment it is managed by a body, in most cases, either denominated board of trustees or board of directors. If the school is a part of a university system, its controlling body is the university board; the St. Louis school, as before intimated, is controlled by a special "managing committee," appointed by the university board.

Two schools, those of Toledo and Cleveland, both public schools, call for separate comment by reason of the circumstances connected with their establishment and the influence of those circumstances in the matter of their government.

The estate given by J. W. and Susan Scott and others to found the Toledo University of Arts and Trades being insufficient to carry out the intention of the donors, the university board tendered the property to the city of Toledo, on condition that the city would assume the trust. The conditions having been accepted, the common council established the Toledo University under a board of directors (trustees), of which the first department to be established was the manual training school. The board of directors of the Cleveland school is composed of eight members selected by the corporation owning the property and seven selected by the board of education of the city, the city paying the running expenses.

The title of the officer in charge is, in the greater number of cases, principal; in five instances he is called director. In the case of the Baltimore school the principal is a naval engineer, detailed for special duty by the Secretary of the Navy.

As a rule the membership of the controlling body is large, while the term of service is short. At Philadelphia, Baltimore, and Omaha, and in other cities the subject of manual training is placed under the care of a committee of the public school board. How far the short duration of service is modified by reappointment we cannot say.

In the chapter devoted both training of teachers (p. 411) we have found the president of the Colorado Teachers' Association advising his colleagues that the power of managing his school was in the hands of the teacher, since both the trustees and the public, though disposed to think they know what they want are willing to confess, tacitly at least, their ignorance of the means of attaining it, depending on the teacher for a plan. Is and has it been so in the case of these schools? The discussions of the "Board meeting" and the private conferences preparatory to official action do not appear in the annual catalogue of the institution for obvious reasons, much less may they be made a subject of inquiry by this Office. But having in mind the splendid condition of the schools of St. Louis, of Chicago, and others, and applying the maxim "as is the teacher so is the school," we can run no danger of being criticised as overbold in saying that the directors have a controlling power although they are not "the controlling body." Their limitations are financial rather than arbitrary.

TABLE 76.—Manual Training Schools, Requirements for Admission, Fees, and Length of Course.

Name of School. [Abbreviated.]	Requirements for Admission.		Tuition Fee to—		Years in Course.	Weeks in School Year.	Hours Devoted Daily to—		
	Literary Attainments.	Admission Age.	Residents.	Non-resi- dents.			Literary Work.	Drawing.	Manual Work.
1	2	3	4	5	6	7	8	9	10
1 Haish School	Completion Grammar Grade...	14	0	0	3	40	1.5	.75	1.5
2 Chicago High School Depart- ment.	do.				2	40	3	(2.5)	
3 Chicago School	do.		{ 1st year, \$80 2d year, 100 3d year, 120	\$80 100 120	3	40	3	1	2
4 Tulane University Department.	do.		50	50	3	40	5	1	1
5 Baltimore School	do.	14	0	50	3	40	3	1	2
6 McDonogh Institute	None.	10-14	0	0	6	42	7	1	1.5
7 School of Practical Mechanics and Design.	Completion Grammar Grade...		0	0	1,2	37	1	2	3-4
8 St. Louis School	do.	14	{ 1st year, 60 2d year, 80 3d year, 100	60 80 100	3		3	1	2
9 Omaha High School Department	do.		0	0			3.5	.75	a1.5
10 Pratt Institute	do.		30	20	3	a40	3	1	2
11 Hebrew Technical Institute	Completion of 4th Grade	12	0	0	3	45	2	2	2
12 New York City College Depart- ment.	Completion Grammar Grade; also elementary Drawing and Geometry.	14	0	0	3	40	3	63	1
13 Cincinnati Technical School	Completion Grammar Grade...	14	{ 1st year, 75 2d year, 100 3d year, 125 4th year, 150	75 100 125 150	4	40	3	1	2
14 Cleveland Training School	do.		10	40	3	a40			a2
15 Toledo School	do.		0	50	4	39		.75	.75-1.5
16 Girard College Department	do.		0	0	5	40			1
17 Philadelphia School	Completion Grammar Grade...	13	0	(b)	3	42	3	1	2
18 Miller Manual Labor School	Completion of 3d Year of Aca- demic Dept.		0	0	3	a42	6	a2.5	a5

b Not admitted.

a Three days a week.

Remarks on Table 76.

The uniformity of the literary requirements for admission in schools of this class is remarkable; none, except the Hebrew Technical Institute, will admit a student that is not prepared to enter a high school. Thus the proper elementary foundation of the intending pupil is insured. Fourteen seems to be the age, at least as far as given, at which the applicant is admitted. The Philadelphia School and the Hebrew Technical Institute, however, are exceptions to this, the age being 13 and 12 respectively. These are minimum limits; what the average age of those admitted is we do not know.

In several instances the requirements are somewhat higher than what is usually denoted by "studies of the grammar grade." But it is unprofitable to discuss this, since the important fact is that the pupil, before entering, must have been well grounded in the elements of learning and must have attained to the physical maturity necessary for his future studies; for even where the minimum age is not given it may safely be implied from the literary requirement.

Four schools charge tuition, two of these are attached to a university, and two are conducted under the auspices of societies. At the St. Louis school the cost for the course of three years is \$240; at the Chicago school \$300; at the Tulane University Department, \$150; at the Cincinnati Technical School (course of four years) \$450. Where the schools are public institutions tuition of course is free, the charge at the Cleveland school being for material used. It will be observed that in several instances non-residents attending public schools are charged an annual fee of forty or fifty dollars.

The course of these schools is of three years of about forty weeks each, but at the Cincinnati and the Toledo schools it is of four years, while at the Haish School the period of instruction is reduced to two. At Omaha the full course has not yet been introduced, the work being confined to wood-working;¹ at the Chicago High School only the first and second years wood-working and forging have been introduced.

The normal distribution of time between the two concurrent systems of development is, taking the early schools into consideration, three hours for literary work and three—two for shop work and one for drawing—for manual training. At Tulane University the preponderance is greatly on the side of literary training, while at the School of Practical Mechanics and Design the converse is true. In several instances the manual training is given three times during the week. At the Miller Manual Labor School, where instruction is given in this way, the work continues for five hours, is lumped, as it were. At the Cleveland school there is no literary department, the manual training pupils being drawn from the city high schools. Minor differences are exhibited better by the table than they could be here described.

¹ There are several other systems which have manual training departments in their high schools. See Table 71, Column 6, and p. 890 *et seq.*

TABLE 77.—Manual Training Schools,

	Name of School. [Abbreviated.]	Studies of Literary Department.						Manual Training is Conducted on—			
		Higher Mathematics.	Science.	Foreign Language.	English Language.	History.	Civics or Political Economy.	Three Year Plan.			Other.
								Pupils in—			
								Wood.	Forging.	Machine shop.	
	1	2	3	4	5	6	7	8	9	10	11
1	Haish School.....	Yes..	Yes..	Yes..	Yes..	Yes..	Yes..	14	8	2	.....
2	Chicago School.....	Yes..	Yes..	Yes..	Yes..	Yes..	Yes..	98	67	37	.....
3	Chicago High School Department.	Yes..	Yes..	Yes..	.....	.....	.....	50	30	(a)	.....
4	Tulane University Department.	Yes..	Yes..	Yes..	Yes..	Yes..	No..	.....	.....	.....	Swedish system...
5	Baltimore School....	Yes..	Yes..	No..	Yes..	Yes..	Yes..	6123	50	35	Printing also.....
6	McDonogh Institute	cYes..	cYes..	cYes..	Yes..	Yes..	.....	.....	.....	.....	c Carpentry, print- ing, farming.
7	School of Practical Mechanics and Design.	Yes..	No..	No..	No..	No..	No..	40	16	18	.....
8	St. Louis School	Yes..	Yes..	Yes..	Yes..	Yes..	Yes..	90	74	58	.....
9	Omaha High School Department.	Yes..	Yes..	Yes..	Yes..	Yes..	.....	65	(a)	(a)	.....
10	Pratt Institute.....	Yes..	Yes..	No..	Yes..	Yes..	Yes..	15	0	0	.....
11	Hebrew Technical Institute.	Yes..	Yes..	No..	Yes..	Yes..	.....	45	45	20	.....
12	New York City College Department.	Yes..	Yes..	Yes..	Yes..	No..	No..	100	53	36	.....
13	Cincinnati Technical School.	Yes..	Yes..	Yes..	Yes..	Yes..	Yes..	d30	30	(a)	.....
14	Cleveland School....	Yes..	Yes..	Yes..	Yes..	Yes..	Yes..	88	23	5	.....
15	Toledo School.....	Yes..	Yes..	Yes..	Yes..	Yes..	Yes..	e95	20	7	.....
16	Girard College Department.	Yes..	Yes..	Yes..	Yes..	.....	.....	.....	.....	.....	.....
17	Philadelphia School	Yes..	Yes..	Yes..	Yes..	Yes..	Yes..	156	102	68	.....
18	Miller Manual Labor School.	Yes..	Yes..	Yes..	Yes..	No..	No..	40	15	12	Agriculture and commercial oc- cupations.
	Total.....	.....	.....	.....	.....	.....	.....	1,058	538	298	.....

a Not yet introduced.*b* Forging comes in first year here.*c* Last two years of course.

Literary and Manual Courses of Study.

Equipment for Manual Training.

Building.	Motive Power. (Capacity of Engine.)	Appliances for—			
		Wood-working.	Forging, Mould- ing, etc.	Machine-Shop Work.	
12	13	14	15	16	
4 stories	10 H. P.	18 benches, 8 lathes..	4 forges.....	1 engine lathe, speed lathe, drill, 2 benches, etc.	1
4 stories, 51 by 165 feet.	52 H. P. Corliss	50 benches, 24 lathes	25 forges, 23 anvils, 2 brass furnaces, and tools for 72 pupils.	10 engine and 2 speed lathes, and vises and lathes for 40 pupils.	2
.....	.....	.....	.....	.....	3
3 stories, 120 by 40 feet.	20 H. P.	Provision for 30 pupils.	Provision for 15 pupils.	Provision for 12 pu- pils.	4
1 building, 4 stories, 43 by 90 feet; 1, 50 by 50, and 1, 62 by 92.	3 engines—2 15, and 1, 6 H. P.	Provision for 250 pupils in carpen- try, 75 in pattern making.	Provision for 75 in moulding, 72 in forging, and 75 in sheet metal.	Provision for 150 pupils.	5
.....	.....	.....	.....	.....	6
4 stories and wing..	35 H. P.	20 benches, 10 lathes	11 forges.....	1 speed and 10 en- gine lathes, 10 vises and sets of tools.	7
3 stories, 100 by 45 feet.	50 H. P.	48 benches and 48 lathes with tools.	22 forges, anvils, and tools, 24 moulding benches.	5 speed and 26 en- gine lathes, 12 vises.	8
2 rooms in High School building.	20 H. P.	80 benches and 80 lathes and tools.	(a)	(a)	9
1, 4 stories, and several others.	40 H. P.	36 benches, 12 lathes	36 forges, 36 anvils	.....	10
2, 4 stories.....	25 H. P.	14 double benches, 10 lathes.	1 forge and 2 an- vils, moulding benches.	20 vises, 2 speed, 2 engine lathes.	11
1 room, 35 by 118 feet.	25 H. P. and 8 H. P. gas engine.	30 benches and 30 lathes.	6 forges, 20 anvils..	30 speed and 4 en- gine lathes.	12
1 room, 60 by 90 feet.	7 H. P. gas en- gine.	24 benches and 12 lathes.	24 forges.....	(a)	13
3 stories.....	50 H. P.	44 benches, 20 lathes	20 forges, foundry for 20 boys.	5 speed and 3 en- gine lathes.	14
4 stories, 123 by 58 feet.	60 H. P.	48 benches, 24 lathes	20 forges.....	6 engine lathes, 4 speed.	15
.....	8 H. P.	.....	.....	.....	16
.....	8 H. P.	55 benches, and lathes; 8 speed lathes.	10 forges, anvils, and sets of tools.	35 lathes and 35 vises, and 3 iron lathes.	17
4 stories, 40 by 120 feet; 3 stories, 35 by 100 feet.	1, 30 H. P. and 1, 40 H. P.	Provision for 24.....	Provision for 24.....	Provision for 16.....	18

d The course being of four years the plan differs somewhat.*e* Number in course of first and second year courses.

Remarks on Table 77.

The foregoing table is perhaps the most important of the series. By it are intended to be shown not only what is taught, but the equipment for teaching, as to buildings, motive power, and manual training appliances. That drawing is one of the three essential elements of the curriculum of this class of schools, simple inspection of Column 9 of the preceding table will show, and that in these schools it is mechanical or industrial, or both, if these terms be convertible with instrumental drawing and designing, will be at once inferred from the very circumstances of the case. To present the character of the instruction given in the various courses in drawing, were it always possible, would require the insertion in full of such course in each instance, and even then this would only be the quantity of the work required, its quality not being subject to statistical handling. The same remark holds true of the other two divisions of these schools, considering drawing for convenience as separate from the manual training department. Only those features which are common to all can be registered in a synopsis of this kind; peculiar excellencies of a particular school must be subordinate to the presentation of the characteristics of the class.

From Columns 5, 6, and 7 it appears that the three departments of Professor Bain's "Renovated Curriculum"—science, humanities, and the mother tongue—are well represented.¹ Algebra, geometry, and trigonometry, which, with mechanics in some instances, are the subjects embraced by the term "higher mathematics," are essential to the student who desires to enter a superior technological school, and the same may be said of science, of which, however, only the elements are taught. It must be remembered that these are not finishing schools, they neither pretend to turn out workmen, or completely educated men in a scholastic sense. They are preparatory schools, preparing their pupils to begin work in the world as an apprentice or to enter upon a college career, as each may elect or circumstances dictate, and have, as Principal Klemm remarks of his school, "virtually a high school course, minus the dead languages, but plus manual training." But, as appears, foreign languages are not neglected.

At the Miller Manual Labor School and at the St. Louis school Latin is taught. In the case of several of the schools not reporting their curriculum the answers to Column 4 have been assumed. It is scarcely necessary to say the modern language taught is French or German. At the New York City and Girard Colleges Spanish may be taken.

In the preceding pages we have spoken of the American manual training school. In this system of instruction as introduced into this country and typified by the St. Louis and Chicago schools, the instruction in manual training extends through three years, of which the first is confined to working in wood, the second to forging and moulding, and the third to the finer work of the machine-shop. Had the answer to the question, "Is manual training conducted on the Russian System?" been less frequently "not exactly" or "not quite," the heading adopted for Columns 8, 9, and 10 would have been Russian System rather than "The three year plan," which, in the case of the Cincinnati and Toledo schools, is untrue, since they have courses of four years.

In considering the statistics of Columns 8, 9, 10, the constant diminution of the attendance with each year of the course at once attracts attention. In lately established schools this might be explained by the limitations of attendance caused by inadequate accommodations in the higher grades; but such reason will not hold in the case of the St. Louis and Chicago schools, the oldest of the class. An examination of the list of pupils in the catalogues of these schools, where the students are grouped according to the year of study, shows the same fact exhibited by the table. Of the lowest class of 1884-85, consisting of 100, only 63 per cent. were in the third year class of 1886-87 at St. Louis. Of the 77 enrolled in the lowest class of the Chicago school in 1885-86 about 50 per cent. were in the third year class of 1887-88. "About one-half of those who attend the school remain to graduate," says Director Woodward. It would thus appear that the attendance at the schools of this class is subject to the same process of diminution that obtains in other educational institutions. In the Omaha, Minneapolis, and Washington high schools only the first year of the course has as yet been introduced. In the Chicago High School and at the Cincinnati Technical School the last year is still wanting.

The buildings occupied by these schools consist of three or four stories. In cities, where ground is costly this might be readily explained on that score; but it will be observed that the same fact obtains in the case of the Miller Manual Labor School, which is situated on a farm. In several instances it will be noticed that rooms of the high school building are occupied by the manual training department.

The Toledo, Chicago, St. Louis, and Cleveland schools have the most powerful motive power, so far as this is indicated by the capacity of the engine. At the Baltimore school there are three engines.

¹ Education as a Science, chap. xi.

In conclusion, for comparison with the programme of studies of the St. Louis school, given on page 889, the French Écoles Primaires Supérieurs, of which we have spoken at length on page 856, is here given.

COURSE OF STUDY OF THE HIGHER ELEMENTARY SCHOOLS OF FRANCE.

Theoretical branches.

"The following is the course of study prescribed. The subjects of this programme are apportioned over the three years' course, so as to apply in the best way to the requirements of professional instruction.

MORALS.—The principles of morals, duties, and rights of the citizen, elementary principles of political economy.

FRENCH LANGUAGE.—Methodical study of grammar and orthography, etymology, and derivation of words, exercises in style and composition, elements of the history of literature.

WRITING.—Principles and practice of running-hand, round-hand, and commercial handwriting.

HISTORY.—Principal characters of antiquity, history of France up to the present day, development of national institutions, chief epochs of general history (ancient, middle ages, and modern).

GEOGRAPHY.—Physical and political geography of the world, special geography of France (comprising the divisions for administrative purposes), economic geography, map drawing.

MODERN LANGUAGES.—One modern language at least.

MATHEMATICS.—First year: Theoretical and practical arithmetic, first elements of ordinary geometry. Second year: Advanced arithmetic, elements of algebra, plane geometry and its applications. Third and fourth years: Principles of algebra as applied to the solution of simple

equations, the elementary principles of rectilinear trigonometry as applied to the estimation of triangles, elementary principles of solid geometry and their application, the common curves.

ACCOUNTS.—First principles of commerce and account keeping, book-keeping, current accounts bearing interest.

PHYSICS.—The most important phenomena and the principal theories of physics, modern discoveries and the applications of science to daily life.

CHEMISTRY.—Exercises involving the observation and examination of some of the familiar facts introductory to the study of chemistry, the metalloids and the most useful metals, the laws of chemistry, the elements of organic chemistry.

NATURAL HISTORY.—Organs and functions of men and animals, practical study of the principal groups of animals and vegetables, application of hygiene to the local industries, principal facts of geology, and examination of the best known minerals.

SINGING.—Choir, with three parts.

GYMNASTICS.—Exercises with apparatus and military drill.

Professional Instruction.

"The programme of professional instruction in the workshops is apportioned to the three years, as follows, and is in practical operation in a number of schools:

First Year.

[Two hours per day.]

DRAWING AND MODELLING.—Execution of the regular geometric solids of given dimensions from figured sketches.

WORKSHOP TEACHING.—(First period)—Working in wood: A box, a drawing board, a mortise and tenon-joint, a slit and tongue-joint, a joint halved together obliquely, a St. Andrew's cross, various kinds of scarfed joints.

(Second period)—Working in iron: Exercises with the file on an uneven piece of iron. Make rectangular parallelepiped, with a square base of given dimensions; this to be converted into an octagonal prism, then into one with sixteen sides; this to be filed round; then, in the lathe, to turn this into a cylinder of specified diameter, and finally convert it into a hexagonal prism.

(Third period)—Working in wood: Various kinds of dovetail joints, splices, skew-splices, halved together, scarf-halved with dovetail pieces.

(Fourth period)—Working in iron: Tool making, two rules in iron of given dimensions, two plain squares, a pair of callipers, exercises with the lathe and cutting chisel.

Second Year.

[Three hours per day.]

DRAWING AND MODELLING.—Execution in graduated series of ornamental casts composed of elements of solid geometry, arranged systematically; rosettes, etc.

WORK IN THE SHOPS.—(First period)—Working in wood: Mortise and tenon to moulded work, tenon for mitre-joint, mortise and tenon with chamfered dovetail, tongued joint with cross-ties, mortise and tenon for quoins.

(Second period)—Working in iron: An angle out of square, a pair of pointed compasses, a hand vise.

(Third period)—Working in wood: Angle open mortise-joint, slit and tongue joint in two

Second Year—Continued.

thicknesses of stuff, stepped mortise and tenon, square joint of two cylinders, oblique joint of two cylinders, a pair of screw-clamps.

(Fourth period)—Working in iron: Bit pinners, screw-wrench, exercise with the lathe, exercise with the cold chisel.

Third Year.

[Five hours daily the first six months, seven hours the last six.]

DRAWING AND MODELLING.—Elements of architecture, orders and styles, ornaments of the different orders and styles.

Industrial drawing: Theoretical principles of composition and of the arrangement of colors.

General principles of the application of drawing to pottery, to fret cutting in wood and metal, to artistic locksmith's work, and to the ornamental stamping of paper and fabrics.

CHEMISTRY.—Experiments in the laboratory, manipulation, analyses, mode of fixing colors (applied to pottery, stuffs, etc.).

ACCOUNTS.—Industrial account keeping, fixing of a scale of profits, applying the same to the work of tools and machines.

WORK IN THE SHOPS.—(First period)—Working in wood: The making of tools, moulding-block, mitre-block, wood bench-clamp, tenon saw, small hand saw, inlaying saw, a plane, use of the wood lathe.

(Second period)—Working in iron: The making of tools, a pair of steel squares (one of them to be a rim square), a tap wrench, working with the cutting chisel.

(Third period)—Working in wood: The making of tools, a plane, jack plane, square, marking gauge, grooving plane, work with the lathe, model making.

(Fourth period)—Working in iron: Making a shifting gauge, working at the forge, elementary work, making of tools, chisels, cross-cut chisels, boring bits, etc., working at the lathe and with the cutting chisel.

TABLE 78.—*Manual Training Schools, Instructors and Pupils.*

	Name of School. [Abbreviated.]	Instructors.				Pupils.						
		Literary Department.		Drawing.	Manual Training.	Enrolled.		Present.		In Literary Department.	In Drawing.	In Manual Training.
		Male.	Female.			Male.	Female.	Dec. 1, 1887.	June 1, 1888.			
1		2	3	4	5	6	7	8	9	10	11	12
1	Haish School.....	5	2	1	1	24	1	20	13	25	25	25
2	Chicago School.....	3	1	2	4	202	0	202	192	202	202	202
3	Chicago High School Department.			1	2	85	0			85	85	85
4	Tulane University Department.	13	0	3	4	265	0			265	265	265
5	Baltimore School.....	6	0	3	7	601	0	275		601	601	601
6	McDonogh Institute.....	6	0	3	3	96	0	90	83	90	90	90
7	School of Practical Mechanics and Design.			12	3	82	31				113	78
8	St. Louis School.....	4	1	2	4	222	0			222	222	222
9	Omaha High School Department.				1	84	10					94
10	Pratt Institute.....	3	1	63	4	15	0	15	15	15	15	15
11	Hebrew Technical Institute.	3	0	2	4	130	0	90	110	130	130	130
12	New York City College Department.	5	0	1	2	198	0	176	153	198	198	198
13	Cincinnati Technical School.	4	1	2	1	60	4	64	56	60	64	62
14	Cleveland School.....			2	4	140	0	82	121		140	140
15	Toledo School.....			1	66	129	174	220	200			
16	Girard College Department.			1	5	450	0					450
17	Philadelphia School.....	6	0	2	4	289	0	283	326	326	326	326
18	Miller Manual Labor School.	6	8	2	48	194	73	243	246	267	40	257
	Total.....	69	14	32	67	3,246	293					3,250

a Reported as 330.

b Of these one is a lady.

c Of these three are ladies.

d Of these two are ladies.

Remarks on Table 78.

The above table contains the statistics that have been given in these reports for several years. Although the facts as tabulated are purely numerical, an examination of the several columns shows that other facts may be inferred. It is perfectly obvious that the corps of instructors in these schools is composed of men. This was, of course, to be expected in the manual training, perhaps even in the literary departments, but it will be observed that the fact holds in the case of drawing. Examining the statistics of enrolment the male element is found to far surpass the female. The query here, however, is, Why should there be any females in schools conducted on the Russian system? In the case of the School of Practical Mechanics and Design it is inferred that the young ladies in the school are following the course in design and wood carving, in which "the instruction in wood carving advances in parallel lines with original design—from its first rudiments to the most elaborate work—with a view to developing the eye, the hand, and the imagination at the same time." At the Omaha School the girls have until recently been admitted, while at the Toledo School a separate department, in which cooking and sewing is given, has been instituted.

In considering the columns in which are given the number of instructors, teaching what may be called literary subjects, the distinction between the manual training school as a department of an educational institution, only a part of whose students are taking the manual training course, and the manual training school proper, where every student of the literary department is also a student in the shops, must be kept in mind. The only seeming exaggeration as to the literary faculty is in the case of Tulane University Department, and the Office is not prepared to say that even in this case it is more than a probability.

Several schools do not answer the inquiry, notably the Cleveland School, the principal remarking that nothing but manual training, including drawing, is taught in that school. While this may impair the accuracy of a total of the number of instructors in the literary department, it has no influence on the individual statements of the manual training schools proper.

In manual training schools pure and simple, as, for instance, the private school at Chicago and the public one at Philadelphia, the literary faculty varies from four to six in number. This teaching corps has a teacher or a professor of science (chemistry and physics); of mathematics, to which is attached another subject; and of English and history. But the lines are not strictly drawn and mathematics are united with English, with physics, or with physiology, according to the school. At the St. Louis School a somewhat different arrangement of the literary faculty obtains. Here the third year class, the highest, is in charge of an "assistant" to the director, who has himself an assistant. The second and first year classes are also, respectively, in charge of an assistant to the director, and all these gentlemen, it would appear, are aided by an assistant in physics, and by another, a lady, in language and history.

The statistics of the teaching force of the manual training department are not liable to the objection that can be made against a total of the literary corps of instructors as given in the table. It appears that there were 32 instructors of drawing in these schools and departments, all men with one exception. In six schools it appears from the catalogues that one at least of the drawing teachers of each school had other duties to perform.

In the workshops of these schools there are 62 instructors, excluding five female teachers. These teachers are known as "Instructors;" instructors in wood-work, in iron-work or metal shop, etc. In general there is an instructor for each of the departments—wood-working, foundry, iron-working, and machine construction and finishing. In several instances the instructor of the wood-working department has an assistant or colleague. At the Chicago Manual Training School the wood-working department, the forge and foundry, and the machine shop have each an instructor, he of the wood-working shop having an assistant. At the Tulane Department there are two instructors in "wood working," one in "iron-working," and one in "machine construction." The Baltimore school has an instructor of "carpentry and wood-turning," another, in the same department, of "pattern-making and moulding;" one of "forge and sheet-metal work," and, in the same department, another for "machine-shop work and finishing." It would appear from this the Baltimore has two departments—wood and metal working. At the school of Practical Mechanics and Design there is an instructor in "metal-work," and two others in "mechanical engineering." At St. Louis there is an instructor in "wood-work," another in "forging," a third in "iron-work," and over all a superintendent. At Cincinnati there is a teacher who is in both the literary and shop departments. One of the teachers of drawing is also a shop instructor, there being but one instructor whose time is wholly devoted to the manual training given. At Philadelphia there is an instructor of "wood-work," one of "smithing and foundry" work, one of "metal work," a fourth of "mechanical construction." At Girard College there are instructors in "carpentry," in "wood-turning," in "foundry and forge," and in "iron-work."

The Office has quoted the specific part of the designation of the members of the several corps of the manual training departments, fearing to generalize and say that the work carried on in these schools amounted to about the same thing and was subject to the simple division adopted by the Chicago Manual Training School—wood-shop, forge and foundry, and machine shop.

It would be interesting to know the social strata from which these schools have drawn their pupils and the vocations followed by these after graduating. As to the first matter there is no room for doubt as to the condition from which the philanthropy of a Girard, a Miller, or a McDonogh has lifted the friendless and poverty-stricken youth of the district, for which each has caused a school to be established; these schools are specifically for "poor boys."

At the recently founded Pratt Institute "it will be the endeavor to make possible by some means consistent with self-helpfulness and self-respect the admission of every worthy applicant." One of the conditions of admission to the Hebrew Technical Institute is that the child be poor.

These institutions, with the exception of that established by Mr. Pratt, are eleemosynary; their wards are too young when admitted to have the feeling of honorable independence that Mr. Pratt would inculcate or sustain.

But these private and public schools as a class are by no means eleemosynary. In the first place manual training has not been adopted by them as the best means of scientifically teaching a trade, but they have been, or at least are now being, established to afford opportunities of acquiring a completer education than is given by the purely lit-

erary course of elementary and secondary education, which, as many critics claim, is entirely too bookish. If the Office understands aright the phrase, "We do not teach a trade" (and the language used by the directors of the St. Louis and Philadelphia schools in particular), so constantly used by the chief officers of these schools, it is as though a college president were to say, "We do not teach Greek to make Hellenists." The object of the work is training, in one kind of school of the mind and hand, in the other of the mind.¹ In both the subject matter of instruction is not the end, but in the manual school this instruction has a practical value, at least to the intending mechanic, while it is quite a common place to say that Greek and other time-honored academic studies are only smattered in to be forgotten. In the second place, these schools are not fostering; they are not yet even boarding schools;² but as educational institutions of a more practical and therefore better type, so it is claimed, place themselves boldly in open competition with other secondary institutions of the country.

To the inquiries, then, as to the social standing of the pupils in attendance at these schools and their subsequent careers may legitimately be added a third, or, for the present purpose, the three may be looked upon as resolving themselves into the inquiries, Are those who are desirous of fitting themselves better for non-technical pursuits or for those called learned (see page 890, extract from catalogue of St. Louis School) following the course of these schools? Are pupils or guardians attracted by the educational advantages these schools offer, an abstract point of view, or by the industrial character of the course, a view essentially concrete and in unison with the practical spirit of a business community?

The indelicacy of asking for information that would show the social standing of the pupils in attendance at these institutions is an insurmountable obstacle to soliciting it. Fortunately, however, for our inquiry the city superintendent of Cleveland gives statistics of the kind desired. The last class entering the manual training school of that city numbered 58, the members being pupils of the Central High School, with the exception of six. Three are orphans. The occupations of the parents are as follows:

Architect.....	1	Clerk.....	1	Railroad purchasing agent.....	1
Civil engineer.....	3	Clerk of court.....	1	Salesman.....	5
Druggist.....	1	Grain inspector.....	1	Saloon-keeper.....	1
Lawyer.....	4	Insurance agent.....	1	Foreman.....	2
Minister.....	2	Manufacturer.....	4	Gardener.....	1
Physician.....	1	Merchants:		Mechanic.....	5
Banker.....	1	Dry goods.....	1	Porter.....	1
Book-keeper.....	3	Lumber.....	5	Roofer.....	2
Business agent.....	1	Grocer.....	2		
Cashier.....	2	Wall-paper.....	1	Total.....	55
		Liquor.....	1		

We have grouped these parents in order to obtain some percentages, but if the reader supposes that much time has been spent as to whether the occupation of a saloon-keeper has more affinity to that of a banker than to that of a druggist or to that of a mechanic he is very much mistaken; the arrangement is rough, and therefore our ratios are only approximate. Fifty-eight per cent. of the parents of the 55 boys were sons of business men—that is, men not following a technical calling; 20 per cent., including the porter and gardener, were mechanics; 13 per cent. were of the learned professions, and 9 per cent. were of a technical calling. Or, using dress as a basis of classification, 80 per cent. of the parents of the 55 boys were in all probability well dressed, and 20 wore common clothes while working. This shows that the manual training school of Cleveland is not by any means occupied with the education of the progeny of the "lower orders." We are, however, no nearer an answer to our inquiry as to the motives that have induced these parents to send or permit their children to attend the manual training school.³

¹The thorough going advocate of these schools as educative institutions might prefer to say that the manual training school, trained the mind *through* directing the hand to perform the mind's dictates, while the college trained the mind to comprehend language, and thereby the ideas of others minds.

²In France the *Écoles supérieures primaires* are.

³In the high school of Philadelphia, then a city of about 200,000, there were in 1840 65 pupils whose parents were classed professionally thus:

Artist.....	1	Baker.....	1	Plasterer.....	1
Clergyman.....	1	Blacksmith.....	1	Plumber.....	1
Sailing master.....	1	Book-binders.....	1	Pumpmaker.....	1
Teacher.....	1	Bricklayer.....	1	Stone cutter.....	1
Clerk.....	3	Carpenter.....	2	Tailor.....	1
Collector of taxes.....	2	Combmaker.....	1	Tobacconist.....	1
Contractor, railroad.....	1	Cooper.....	1	Turner.....	1
Inn-keepers.....	2	Corder.....	1	Watchmaker.....	1
Manufacturer.....	3	Cordwainers.....	8	Weaver.....	1
Merchant.....	5	Distiller.....	1	Laborers.....	3
Store keeper.....	4	Farmer.....	1	Unknown.....	5
Trader.....	2	Hatter.....	1		
Victualer.....	1	Iron founder.....	1	Total.....	65

"Until lately," says John Stuart Mill,¹ "all employments which require even the humble education of reading and writing could be recruited only from a select class, the majority having had no opportunity of acquiring these attainments. All such employments accordingly were immensely overpaid as measured by the ordinary remuneration of labor. Since reading and writing have been brought within the reach of a multitude, the monopoly price of the lower grade of educated employments has greatly fallen, the competition for them having increased in an almost incredible degree."

The founder of the science of political economy remarks:² "The wages of labor in different employments vary according to the probability or improbability of success in them. The probability that any particular person shall ever be qualified for the employment for which he is educated is very different in different occupations. In the greater part of the mechanic trades success is almost certain but very uncertain in the liberal professions. * * * In a perfectly fair lottery those who draw the prizes ought to gain all that is lost by those who draw the blanks. In a profession where twenty fail for one that succeeds that one ought to gain all that should have been gained by the unsuccessful twenty."

The leaders of the manual training movement stoutly maintain the educational value of these schools, but it is a question if the patrons are not reasoning like Adam Smith or Stuart Mill. It is folly to deny that there is considerable discontent with the present system of education which, in its academic features, is an importation, and in the elementary grades, though indigenous, rather the adaptation of modern times³ of a system that had its origin during the seventeenth century among a remarkable people having as its only text-book the work whose momentary presence in the schools causes so much discussion now.

As to the subsequent career of the graduates the Office has some statistics. Let us hear what Director Woodward has to say about the St. Louis school. It is thought the quotation is not too long for those who would know something of this subject:

"The number of students attending the school last year was 230. The number who were graduated, receiving the diploma of the school, in June last was 52. Of those at least eighteen have entered Washington University or elsewhere as freshmen; a majority of these advanced students will become engineers, architects, or teachers. The school thus proves to be a most successful preparatory school for higher education. Those who have gone to work have scattered into a great variety of occupations, the greater number finding opportunity to profit by their knowledge of tool work and workmanship. The tendency towards responsible and lucrative positions is highly marked. The following list of occupations includes all the graduates of the first three classes—1883, 1884, and 1885:

Students of engineering, law, or medicine.....	20
Clerks.....	22
Teachers.....	10
Draftsmen or architects.....	10
Machinists.....	6
Artisans: Pattern-maker, bricklayer, shoemaker with power machine, moulder, electrician.....	5
Farmers or ranchmen.....	4
Business men.....	6
Foremen or superintendents.....	4
Ticket agent.....	1
Engineers—mechanical, civil, or mining.....	7
Manufacturers.....	6
Total.....	101

"Over a year ago the average monthly wages of those in the above list who were earning regular wages was about \$74. Their average age at that time was twenty years.

"In the higher classes of this university I am daily brought in contact with graduates of the Manual Training School, and I have abundant opportunity to observe their mental and moral characteristics. My observation confirms the unanimous verdict of my fellow professors, to the effect that manual training is almost indispensable as a preparation for higher scientific or professional training. It gives great power of close examination and logical analysis. It encourages habits of precision and system in planning and executing tasks. It makes many things possible in the laboratory and class-room which would otherwise be almost out of the question. When a student turns to his draughting in-

¹ Political Economy, B'k II, Chap. xiv, Sec. 2.

² Wealth of Nations, B'k I., Chap. x, Part I.

³ In an article entitled "L'Éducation Hygiénique et le Surmenage Intellectuel" (Revue des Deux Mondes, 15 of May, 1887, number) Monsieur Rochard, of the French medical academy, remarks: "Each step that civilization has made, each conquest realized in the domain of intellect has been signalized by another addition to the programme of the schools."

struments and to the bench, lathe, or anvil as naturally and with as much confidence as to his table of logarithms or his dictionary, he occupies a vantage ground which his fellows are quick to recognize.

"As to the ability of our graduates to step to the front in the line of practical mechanics, I take the liberty of quoting from the letter of the general foreman of a large system of railway shops, sent in answer to an inquiry as to the outcome of manual training:

"As an employer, I will say for several of the manual training school boys I have working for me, that they will in one year accomplish as much as the ordinary boy (who has not received the training the manual training school gives) will in three. For example, I have two boys working side by side, one from the school and the other an uneducated boy; the former has been working here nine months, while the latter has been here over three years, and to-day the boy from the school will do better, cleaner, neater, quicker work by far than the other boy. One boy learns the trade by imitation, while the other learns it by reason and study. The boy from the school is more precise and neat about his work, grasps a new idea more readily, looks upon the new features of the business with greater intelligence, and is better able to direct others and to bear responsibilities. He has better command of language and can impart to others the ideas he wishes them to obtain. When a difficult point arises the school boy will labor with it until he conquers it, while the other boy will study a while, then give it up. Were I to need a clerk, apprentice, or draughtsman I would and do give the Manual Training School boys the preference, because I get much better results with less trouble."

"I am tempted to add, as a final word, the testimony of a graduate himself (one out of two hundred) and the work he is doing. He says:

"The principal part of my work is the making of wood and brass patterns and core-boxes, and keeping them in order; I also do the greater part of the drawing for the shop; but I am by no means limited to these, as, for the last three or four days of each month, I am called to help get work out, and to help Mr. Jones figure, etc. * * * *I usually get the work that is out of the ordinary line.*"

In the Chicago Manual Training School 19 of the 49 graduates of the first class, that of 1886, are attending higher technological schools, principally the Massachusetts Institute of Technology, Sibley College, Cornell University, and Purdue University. Of the 55 students who have withdrawn from the Baltimore school all but six are following mechanical pursuits. At the Philadelphia school about 20 per cent. have gone to colleges, 10 per cent. have returned to pursue special courses, and about 50 per cent. have engaged in some business in which mechanical skill and drawing is the essential requisite.

With these figures before us we cannot resist the conclusion that the graduates of these schools are apt to follow a mechanical occupation, and the question arises whether this tendency is due to the technological training received in these schools. We have given, on page 870, the analysis of the statistics of the Erie, Pa., high school for the twenty years last past, in which the principal sees a proof of the falsity of the charge that the public schools are educating their pupils to dislike working with their hands; and we will now give the statistics as to the vocations followed by the 600 graduates of the Philadelphia high school from 1843 to 1846, attempting to classify them under two heads:

WITH HANDICRAFT.		OTHERS.	
Architect.....	2	Glass Cutter.....	2
Dentist.....	1	Hatter.....	2
Druggist.....	9	Iron Founder.....	2
Engraver.....	12	Machinist.....	26
Baker.....	2	Mariners.....	15
Blacksmith.....	13	Painters.....	8
Book-binder.....	10	Plasterers.....	2
Bricklayer.....	17	Ploughmaker.....	1
Brickmaker and stone cutter.....	8	Plumber.....	1
Carpenter, etc.....	83	Printer.....	20
Cooper.....	2	Sadler.....	8
Cordwainer.....	25	Sailmaker.....	2
Currier.....	11	Tailor.....	3
Cutler.....	1	Tinman.....	3
Farmer.....	20	Tobacconist.....	3
Gilder.....	2	Watemaker.....	4
		Weaver.....	4
		Cadet.....	2
		Clerk.....	45
		Stores.....	169
		Conveyancer.....	17
		Engineer.....	10
		Grocer.....	4
		Jeweler.....	3
		Lawyer.....	4
		Manufacturer.....	3
		Physician.....	2
		Teacher.....	33
		Unascertained.....	22
		Dead.....	1
		Total.....	639

It will be observed that the clerks, that much-abused class, compose about 35 per cent. of the whole number as far as ascertained. It will also be noted that about half of the whole number labor with their hands. To such the technological training of the manual training school would have been of more or less value.

The total number of graduates from the several schools has been 589, of whom 275 graduated in June, 1888.

Turning to Table 78 we find that the number of pupils enrolled, is of males, 3,246; of females, 293. Comparing the statistics of the schools reporting for the year 1886-87 and

for the year under review, excluding the statistics of the New York college department, there has been a net increase of 493 in enrolment. Of this increase the Baltimore school has contributed 328 pupils, due to causes already explained.¹

The statistics contained in Columns 8 and 9 would seem to show that the attendance was maintained quite evenly during the year, although large increases are noticed at the Cleveland and Philadelphia schools. The very valuable statistics of the public school systems, known as average attendance, not being attainable here, these questions (the captions of Columns 8 and 9) were asked in hope that the answers would show, approximately at least, the variation of attendance during the year. Thus it will be observed that the enrolment of the Chicago school (Column 6) is given as 202, the same as the answer to Column 8; that the same columns and Column 9 show 130 enrolled at the Hebrew Technical Institute and 90 present December 1, 1887, and 110 June 1, 1888. The New York City College department had 198 enrolled and 176 present December 1, and 158 June 1. Philadelphia returns 289 enrolled during the year and 328 present June 1, 1888. Suppose the Office were inclined to satisfy the craving after "per capita" expense, not for purpose of convenience in comparing an institution at a specific date with its record, but for purposes of comparison with other schools, ought it to take, in the case of the Hebrew Technical Institute, for instance, "The total number enrolled excluding duplicates," that is, 130, or 90, as given in Column 8, or 110, as in Column 9, giving respectively \$100, \$144, and \$117 as the per capita cost? It is the same with the fine schools of Chicago and Philadelphia, although the variation is by no means so large.

TABLE 79.—*Manual Training Schools, Finances and Property Values.*

Name of School. [Abbreviated.]		Property Values.		Receipts from—				Expenditures for—			
		Apparatus.	Real Estate.	State or City.	Tuition.	Interest.	Other Sources.	Buildings and Improvements.	Salaries.	Tools and Machinery.	Material Used.
1		2	3	4	5	6	7	8	9	10	11
1	Haish School.....	\$2,500	\$25,000								
2	Chicago School.....	15,000	75,000	0	\$16,105	0	\$1,945	\$545	\$14,220	\$761	\$833
3	Chicago High School Department.			\$3,583					3,140	26	422
4	Tulane University Department.	30,000	25,000								
5	Baltimore School.....	20,000	28,500	16,000	0	0	0	400	11,100	5,000	1,500
6	McDonogh Institute.....	1,000	257,527	0	0	\$43,042	0		4,421		
7	School of Practical Mechanics and Design.	15,000	35,000								
8	St. Louis School.....	10,000	45,000	0	12,495	5,872	0		15,458	1,400	870
9	Omaha High School Department.	2,457		2,590	0	0	0	170	1,850	150	147
10	Prairie Institute.....										
11	Hebrew Technical Institute.	7,500	55,000	0	0	0	\$11,000	1,000	10,500	750	750
12	New York City College Department.				0	0	0	92		263	122
13	Cincinnati Technical School.	3,000		0	5,000	0	0		4,600	1,200	300
14	Cleveland School.....	20,000	20,000	17,000	700						
15	Toledo.....	18,000	25,000	9,000			1,200		6,500	3,060	1,200
16	Girard College Department.	(100,000)		0	0	(d)			7,344	(2,220)	
17	Philadelphia School.....	2,500	46,000	19,211	0	0	0	\$3,793	14,025	700	693
18	Miller Manual Labor School.	35,000	325,000	0	0	71,902	0	15,766	15,627	1,064	1,661
Total.....		(100,000) 151,957	92,027	67,299	34,300	121,416	14,145	21,766	109,785	(2,220) 14,814	8,498

¹ Page 895.

a Voted by Commercial Club of Chicago to meet deficit.

b Other expenses, \$1,691.

c The amount of subscriptions.

d The interest from the Girard fund for 1887 was \$1,228,189, of which \$446,992 were expended on the college.

e Books, \$900.

Remarks on Table 79.

Of the several columns in which are given the receipts of manual training schools the two devoted to the amount received from municipalities and from tuition fees are the most interesting. Considering the public schools only, Philadelphia stands first with an appropriation of over \$19,000, 73 per cent. of which was expended in salaries; at the Baltimore school, 69 per cent. of the \$16,000 appropriated were expended for salaries, excluding that of the principal for reasons already noted under Table 75.

The expenses of the Baltimore City College—the city high school—for the year 1887 were \$35,293, of which 78 per cent. were for salaries. For the same period the amount paid for salaries in the Manual Training School was about 60 per cent. of the total amount (\$11,000) expended, and the cost of material for lessons in the shops, 5 per cent. This matter of proportionate expense will be again taken up.

The very large appropriation made for the Cleveland school must also be noted. Of the schools charging tuition, the St. Louis and Chicago schools are preëminent by reason of their receipts from this source, the latter being the only manual training school, precisely speaking, that reports an endowment. Of the \$1,945 (Column 8) received by the Chicago school, \$1,763 were given by the Chicago Commercial Club to supply a deficit, and, as before stated, the Cincinnati Commercial Club pays half of the expenses of the school in that city. The Hebrew Technical Institute is entirely supported by subscriptions. No gifts or bequests have been made to this class of schools.

Of the expenditure for new buildings, the amount expended at Philadelphia and at the Miller Manual Labor School, where forging and foundry work have just been introduced, are noteworthy.

Comparing the amount paid for salaries in the Chicago, Baltimore, St. Louis, and Philadelphia schools, and bearing in mind that the principal's salary of the Baltimore school (\$2,400) is not included in the amount paid by that school, it is noticeable how little they vary. These schools are complete institutions, not departments of a high school or college, and now are fully equipped for work. If these figures can be generalized upon it may be said that the annual cost of the teaching corps of a manual training school falls somewhere about fourteen or fifteen thousand dollars. It must be admitted, however, that the Hebrew Technical Institute pays a third less than this, but as the course has recently been extended, additional instructors may be required. The Cincinnati Technical School, also complete in itself, may be said to have just gotten fully under way. Considering the same schools as above, the annual cost of materials used is between seven and nine hundred dollars annually.

The reader will readily see that if the cost of teaching in an institution containing 10 students were \$10,000, the per capita cost of teaching would be \$1,000; and if in the same institution, with the same teachers, there were 100 students, \$100. In brief, not to expand so obvious a thought, before such a per capita becomes of value it is necessary, especially when the amounts are comparatively small, to have, as a standard, the per capita of some school, ideal or real, where the teaching is perfection and the attendance just what it should be, and even then it would be necessary to compare the facts of observation, as well as the averages. But the cost of the material annually used, although not entirely free from error, has an individuality about it that does not belong to the teaching of a member of a class. Comparing the number of pupils (not the average attendance be it understood) enrolled in the manual training department (Column 12, Table 78) with the cost of material used, the following per capitâs are obtained, so varying as to defy generalization:

Chicago High School Department.....	\$4.96
Chicago School.....	4.12
Baltimore School.....	2.50
St. Louis School.....	3.92
Omaha High School Department.....	1.56
Hebrew Technical Institute.....	5.77
New York City College Department.....	.62
Cincinnati Technical School.....	4.84
Philadelphia School.....	2.13
Miller Manual Labor School.....	6.22

INDUSTRIAL TRAINING.

In the foregoing division we have examined a species of educational influences which is brought to bear upon the pupil by placing in his hands the implements of mechanical labor. We have seen that this education of a pupil by his using tools has been a development, a compromise between the theories of an educational philosopher and the practical system of teaching the principles of the mechanic arts inaugurated by a Russian engineer. We have examined the opinions of those who contend for the introduction of this education as such into the public schools and the view of an opponent, while attempting to find what one side desires and the other opposes. But we have

neglected the argument of the party which would have the study introduced as a matter of political economy, whose argument may be briefly stated by the pedagogical commonplace, "What you would have come out in the land you must first put in the schools." Teach the mechanic arts in the school and you will have mechanics without number, just as the public schools are turning out, say the members of this party, a multitude of half-grown persons incapable of filling any position save that of a clerk, just as the State board of Massachusetts would put drawing into the schools in order that "in a few years our enterprising people will begin to discover in our own communities and schools as good artists and artisans as can be found in the most favored portions of other countries." This is not a pedagogical argument, but the practical common sense of a man of business, and as long as the sentiments expressed by the New York Industrial Association continue to have a following so long must manual training and industrial training, elementary or technological, be kept separate and distinct.

One of the most important purposes desired by the partisans of industrial training, and by those of manual training also, is the inculcation of ideas about labor that will remove the contempt in which it is now said to be held. If the public school pupil can be familiarized with tool work before this unreasonable prejudice can be formed the idea that manual labor is degrading will not be an obstacle to pursuing some form of it; the pleasant nature of the manual training not producing the repugnance towards labor that is felt towards books and study by those who have pursued the usual literary course of the public school. But here the two great parties to the propaganda part company. The industrialists, however, are not unanimous as to the philosophy of their object. Some observing the beneficial results of manual labor in reformatory or protective institutions, on those ambiguously called "juvenile delinquents," appear to view the whole schoolable body, or a large part of it, as wearing the menacing attitude of the "juvenile delinquent," and the public school as a sort of reformatory or protective institution. Others, seeing how unequally the wealth of the world is distributed, think it but right that the monied class, for several reasons, should make some compensation to the less fortunate. Finally, a third section, and this appears to be not only by far the largest, but also of native American growth, would have the schools used as apprentice shops. We may only briefly refer to the second and third opinions, the social importance of the first would require a chapter to itself.

A SOCIALISTIC VIEW OF THE QUESTION.

In giving the characteristics of the course of manual training instruction at Paris, we have refrained from giving a feature that is very remarkable to Americans, at least as a feature of the public school system. Not only are manual training shops added to the equipment of the schools, but a kitchen and dining room have been annexed, in which meals are served for the children. Those who can, pay the small fee asked; those too poor, are given, in a way that the recipients need not be known, the ticket that permits them to obtain the meal. If the parent is too poor to properly clothe the child, the director gives the child an order on the clothing contractor. "It is interesting to see at what little expense this advantageous institution can be introduced into a school, and I" (we are quoting from Consul Schoenhof's report on industrial education in France) "give here in illustration the account of one of the schools. This school has about 500 pupils. From October 1 to December 1 they distributed 5,260 portions, of which 4,116 were sold. The whole cost to the school was 367 francs 85 centimes [about \$74]; the receipts were 205 francs 80 centimes, leaving a deficit of 162 francs 5 centimes [about \$32]."

Commenting on these facts, a writer in a religious journal of the highest literary character uses the following language, republished by the great Industrial Association of New York:

"While the world has had its attention wholly occupied with military preparations and intestine dissensions on the part of France, that country, especially the Socialistic government of its capital, has been silently elaborating an experiment in education that now ought to challenge the attention of every thoughtful mind.

"For this experiment should be credited to Socialism in its noblest aspect. Paris is at present Socialistic—that is to say, inclined to Socialism, though not yet Socialist; and so is its present municipal council. At a recent election that capital gave to the Socialist candidate for a vacant seat in the lower legislative chamber over 100,000 votes, while the united opposition could muster but 135,000 votes, and even the candidate who united these votes upon himself had to style himself a "Socialistic-Radical." The municipal council, though not having more than a dozen thorough, self-conscious Socialists, is yet in its ruling majority governed by Socialistic instincts. In no way is that better shown than by the thoroughness with which they have carried out two educational acts passed by the French legislature in 1880 and 1881.

"These acts provided for perfectly gratuitous, compulsory education of all French children, and—what is the significant feature—manual training in the public schools. This, it must be understood, is a very different thing from the technical institutions that already existed in France, as well as other countries, even in Russia, for the special training of the few for becoming skilled managers, foremen, or artisans. The recent French legislation proposed to make industrial and art education an organic, an integral, part of the whole system of public instruction, and to have manual training begin at the very bottom of the school system; to have it run from the "kindergartens" through the primary, grammar, and high school grades, so that every child, whether destined to be a mechanic or not, should have its hands and mind trained in industrial operations."

Thus it is apparent there is a party of those who urge industrial education which they call manual training on socialistic grounds. Whether these warm-hearted and devoutly religious individuals are they whom Browning, in his *History of Educational Theories*, describes as "those who have wished to reform or to reorganize the world, meeting with many difficulties in dealing with the mass of grown-up people, have turned their eyes to the more hopeful body of ingenuous youth, whose minds are like white paper or pliant wax," and who, as he says, should have been taught better by experience than to indulge in such hopes, or whether they are perfectly justified in entertaining such hopes on the elder Humboldt's aphorism which we have quoted above, must be left to the statesman, and to the reader to decide for themselves.

THE PRACTICAL PARTY'S VIEW.

But by far the larger party is that which sees not the regeneration of the world, not the philanthropy of the thing, but its practicableness, its directness in going into business at the earliest possible moment. It recognizes with the poet that "art is long and time is fleeting," and with Lord Salisbury that the first necessity of man is to live, and his first duty to work. As to culture it would say with Mr. Frederic Harrison, "perhaps the very silliest cant of the day is the cant about culture." The apprenticeship system, says this party, is a thing of the past, and its downfall is one of the most portentous signs of the times. In looking around to find a substitute it sees in the public schools an organization durable and respectable, upon which trade instruction can be grafted. These schools teach too much theory, says this party, and by curtailing such instruction, ample time may be obtained for industrial teaching. The president of Harvard also thinks that the public school course could be advantageously shortened, but he would have this done that the pupil may be enfranchised the sooner, and thus enabled to begin other work.¹ The "conflict between labor and capital" is also a great element in this party's argument, but as this is to be remedied by a substitute apprenticeship system, it resolves itself into that question.

MANUAL LABOR AS MANUAL TRAINING AND AS INDUSTRIAL TRAINING.

The superintendent of an institution for educating one of the "special classes" may think that the mere fact of calling tool-work in a public school manual training and tool-work in his school industrial training, does not make a real distinction. He may think that the work of his school loses none of its value as a form of education because it is used in learning a specific branch of industry.

But it is to be observed that, in the first place, the work of one of these institutions is made for sale, making it more of a factory than a school; in the second, specific trades are taught which the advocates of real manual training are almost tired of telling the public they do not teach; and in the third place the paternal feature is present, the care for the pupil's future business life, that characterizes benevolent foundations.

Should it still be objected that these are differences of a material nature and have no bearing on the effect produced by the work, the Office will, in order to avoid the psychological as it has the social discussion of this question, defend its classification on the perfectly obvious grounds of difference of aim. Technological schools, are treated elsewhere.

I.—INDUSTRIAL DEPARTMENTS OF SCHOOLS FOR THE SPECIAL CLASSES.

Not long after Haüy conceived the idea that since a blind man can readily distinguish two pieces of money he could also distinguish an "a" from an "f" if he could feel them, the first school for the blind was established in Paris, about 1784. Music from the first was a prominent feature of its instruction. The French Revolution having scattered the *Société Philanthropique*, by which the tuition of the blind pupils was paid, the state adopted the school. By the great reorganizers of those tumultuous times the school was at first united with that for the deaf, the first instance of this undesirable combination; then given the character of a workshop and its scholars called "young workers,"

¹ Can School Programmes be Shortened and Enriched, p. 1005 U. S. Education Report 1886-87.

in conformity with the practical spirit of the day; then attached to an asylum; and finally, under the restored Bourbons, reorganized as a separate institution. The new regulation, issued in 1815, says that the aim of the school shall be "to instruct blind children and to give them a *useful trade*."

It may be safely assumed that the many schools established in Europe on this type during the first ten years of the century were also dual in purpose, aiming to impart knowledge and a trade. "The blind in the United States are socially far above those of any other country," says F. J. Campbell, the president of the Royal Normal College for the Blind, of England, and as even now in America it is thought advisable by some to impart the rudiments of a trade in view of the great majority who follow the humbler callings of business life after leaving the school, so, in all probability, was it deemed advisable in Europe in the early decades of the century.

The blind child, having lost the most important of the senses that connect the human being with the outer world, is compelled to rely upon a more than ordinarily heightened condition of the others—Dr. Armitage¹ would say upon a superiority "in intelligence"—in the conduct of life, and his profession should be adapted to his physical condition. Such a profession is music. This subject in its branch of tuning was first introduced into the Paris school by the persistency of a pupil, whose success soon put this instruction on the highest plane of proficiency, and it has become one of the most important objects of the school, though instrumental music as such is most thoroughly taught.

About 1859 systematic musical instruction was introduced into the Perkins Institution at Boston, and, under the immediate superintendency of F. J. Campbell, carried to a high degree of proficiency. In England it was not until 1872 that the Royal Normal College and Academy of Music for the Blind was established.

But while music is eminently adapted as a profession for the blind, by its side in our institutions is the workshop for making brooms, brushes, mattresses, and caning chairs, not introduced, it is believed, on Froebelian principles. "When the three schools of New York, Boston, and Philadelphia were established," says Superintendent Wait, of the New York Institution,² "undoubtedly the views held in Europe, concerning both young and old, made a great impression upon those who established them. The European view was that blind people are, in some way or other, destined to work with their hands."

Turning now to the schools for the deaf the double technical feature is not present, only the workshop remains. Superintendent Clarke, of the Arkansas Institution for the Deaf,³ put the case of industrial education in these institutions thus: "The high honor of establishing the first schools in this country where any persistent attempt was made to teach trades belongs to the institutions for the deaf," and he rather regretfully adds, "But though we began first I hardly think we are keeping abreast of those who started later in the race."

In the schools for the feeble-minded but little, even a little in this case is extraordinary, can be expected; from the reform schools much more than has yet been attempted. In the latter case, however, a reaction has set in against "the self-supporting" theory, as shown in the last report of this Office.

The tables which follow are the first of their kind. They show the statistics of the industrial and, in the case of the schools for the blind, the musical departments of the several classes.

IN SCHOOLS FOR THE DEAF.

"Suppose we simply told a pupil in school to add," says Superintendent Clarke in the address above quoted from, "and never taught him to carry. He might, after a long effort, find it out for himself, but his progress in arithmetic would probably be very slow; yet that is the way trades are taught [in a work-shop of an institution for the deaf taught in an abstract way]. The help the master gives is often worse than none. He 'lays off' the work and leaves the pupil to do it. Better let the pupil 'lay off' and teach him how to work. * * * If he makes mistakes they may be pointed out, but the reason why he made them is very seldom explained to him. * * * If there is any possibility of a boy picking up the knowledge necessary to use it on the job in hand he is left to do so; if not, so much of its use as there is present pressing need for is explained, and no more."

"Are the masters of the shops responsible for this state of things? I don't think so. * * * Their efficiency is judged, not by the shortness of the time in which they can teach a boy their trade, or the number they teach, but by the amount of finished work they turn out—by the dollars and cents the shops make or save."

"This is the fundamental error that lies at the root of all our mechanical teaching and causes much of our trouble. We expect profitable work from learners."

¹ The Education and Employment of the Blind, p. 62.

² Proceedings ninth Biennial Meeting Instructors of the Blind, 1886, p. 36.

³ Proceedings Eleventh Convention of the Instructors of the Deaf, 1886, p. 213.

As Superintendent Clarke, in order to bring out the lights of the "Russian system," may unintentionally have painted the insufficiency of the present industrial instruction in colors too sombre, we will quote from the remarks of Principal Williams, of the American Asylum for the Deaf, in his report for 1885-86: "Almost from the foundation of this school [the first for the deaf in America] industrial training has formed an important part of the education of every able-bodied pupil. So long ago as 1824, two shops had been built for the use of our pupils. If I am not mistaken this school was the pioneer in this country of conjoint industrial and literary education, and most of the schools for the deaf in the United States have followed its example.

"The success of the experiment undertaken by the managers of the school, with many misgivings at first, very soon demonstrated its wisdom. The habits of industry here acquired clung to the pupils as they went forth to the duties of life, and with rare exceptions they have been industrious, self-supporting, law-abiding citizens, not ashamed of work, and having the knowledge and skill to do their work well.

"This double education is insisted upon in the case of every pupil. Sometimes, in mistaken kindness, parents plead to have their children excused from the industrial training, as they will not need to work for a living, or, at least, will not pursue the trades taught here. We can make no exceptions on such grounds. Habits of industry are invaluable, and they should be acquired at the formative period of life. It is of much less importance what one learns to do, than that one should learn to do promptly and well whatever one undertakes. With industrious habits, a trained eye, a skilled hand, and a cultivated judgment, one may acquire a new trade with comparative ease, but where all these are wanting, to start on any new line of work is a difficult task."

The principal then describes the manner in which the two principal trades—cabinet and shoe making—are taught, quotes from a recent address on manual training by the Hon. R. B. Hayes, and remarks on the occupations followed by the male graduates thus:

"It will be seen at a glance at the list given above that there is great variety in the occupations of our former pupils. Comparatively few of them have followed the trades learned here, but all have carried with them the trained hand and eye, the cultivated judgment, and industrious habits here acquired."

At the Pennsylvania school, the third to be established, of 119 pupils taught shoe-making or tailoring (the trades principally taught), 34.5 per cent. followed that taught them at the institutions, and supported themselves thereby. Shoemaking is a very popular trade.

TABLE 80.—Statistics of the Industrial Departments of Schools for the Deaf.

School (for full title and the location see Table 90.)	Industrial Instructors.		Pupils in—					Duration of Work in Hours.	
	Male.	Female.	Carpentry and Joinery.	Shoe-making.	Printing.	Farm or Garden Work.	Other Occupations.	School.	Industries.
1	2	3	4	5	6	7	8	9	10
1 Alabama Institution	1	0	0	0	0	40	0	6	4
2 Arkansas Institute	2	1	0	23	14	0	32	.....	.....
3 California Institution	2	0	12	0	10	0	0	5	3
4 Colorado Institution	1	1	10	0	6	0	0	5	3
5 American Asylum	2	1	23	22	0	0	13	3	3
6 Whipples Home School	1	1	0	0	0	13	12	3	4
7 Columbia Institution	1	0	8	0	0	0	0	4	3
8 Florida Institute	1	1	0	0	0	6	0	4	2
9 Georgia Institution	1	1	0	50	0	0	0	6	2
10 Chicago Day School	0	0	(a)	0	0	0	0	4	2
11 Ephpheta School	1	2	0	0	0	0	0	1	1
12 Chicago Voice and Hearing School .....	.....	.....	.....	.....	.....	.....	(b)	6	6
13 Illinois Institution	4	2	20	40	23	50	24	4	3
14 Evansville Day School	0	0	0	0	0	0	0	5	3
15 Indiana Institution	5	1	42	15	20	0	73	5	3
16 Kansas Institution	4	1	23	20	17	0	3	5	6
17 Kentucky Institution	3	1	12	12	13	10	0	5	3
18 New Orleans Day School	0	0	0	0	0	0	0	5	0
19 Portland, Me., Day School	0	0	0	0	0	0	0	5	0
20 Maryland School for Colored	1	1	0	6	0	0	7	6	3
21 Maryland School	3	1	4	14	9	0	0	5	12
22 New England Industrial School .....	.....	.....	.....	.....	.....	.....	.....	5	4
23 Horace Mann School	0	1	5	7	10	0	0	5	1
24 Clarke Institution	1	1	21	0	0	0	0	5	3
25 Michigan School	3	1	30	30	24	0	80	3	3
26 Evangelical Lutheran Institution	0	0	0	0	0	37	0	5	0
27 Minnesota School	4	1	0	22	12	0	50	3	12
28 Mississippi Institution	2	1	0	0	7	0	0	5	12
29 Missouri Institution	3	2	23	25	15	0	12	5	12
30 Maria Consilia School	0	1	0	0	0	0	4	5	2
31 St. Louis Day School	0	0	0	0	0	0	0	.....	0
32 Nebraska Institute	2	1	16	0	19	0	6	5	3
33 New Jersey School	3	1	8	9	8	0	38	5	12
34 New Mexico School	0	0	0	0	0	0	0	5	0
35 Le Conteulx St. Mary's Institution	3	4	0	9	23	0	56	4	3
36 St. Joseph's Institute	4	5	3	13	0	112	4	2	4
37 Northern New York Institution	0	0	0	0	0	0	0	5	0
38 Institution for Improved Instruction	4	4	44	0	0	0	44	5	2
39 New York Institution	8	4	54	35	28	0	133	4	3
40 Western New York Institution	4	2	15	0	13	0	0	4	2
41 Central New York Institution	2	2	9	24	20	0	50	5	2
42 North Carolina Institution .....	.....	.....	.....	.....	.....	.....	.....	6	2
43 Cathedral School	0	0	0	0	0	0	0	5	0
44 Oral School, Cincinnati	0	0	0	0	0	0	0	5	0
45 Public School, Cincinnati	0	0	0	0	0	0	0	5	0
46 Ohio Institution	4	0	30	40	41	0	24	5	2
47 Oregon School	1	2	12	1	3	0	3	7	3
48 Pennsylvania Institution	4	6	12	50	23	0	209	4	3
49 Private School, Philadelphia	0	0	c13	0	0	0	0	4	2
50 Pennsylvania Oral School	0	0	0	0	0	0	0	5	0
51 Western Pennsylvania Institution	2	1	27	23	0	0	0	5	3
52 Rhode Island School	0	0	0	0	0	0	0	4	0
53 South Carolina Institution	3	1	0	6	7	0	21	6	3
54 Tennessee School	3	2	0	20	18	0	0	5	2
55 Texas Asylum	5	1	2	8	12	0	12	6	4
56 Department University Deseret	0	0	0	0	0	0	0	5	0
57 Virginia Institution	4	1	11	6	8	0	10	5	3
58 Washington School	0	1	0	0	0	0	0	5	0
59 West Virginia School	4	0	1	8	9	0	16	4	3
60 Wisconsin School	4	2	23	54	21	0	4	5	2
61 Public School, La Crosse	0	0	0	0	0	0	0	5	0
62 Milwaukee Day School	0	0	0	0	0	0	0	5	0
63 St. John's Catholic Institute	1	1	0	4	0	0	0	8	3
Total	111	64	508	600	435	156	1,044	.....	.....

a Six pupils attend the manual training department of the Chicago High School.

b Wood-carving, designing, and clay modelling.

c Pupils are taught the use of wood and metal working tools.

Of the 41 institutions giving industrial instruction three confine their endeavors to agricultural occupations. Of the other 38, 29 teach carpentry and joinery, or both, 29 shoemaking, and 23 printing. These trades are not special to any particular institution, but are all, or two of them at least, present in the great majority of instances. Of the trades whose following is given in Column 8, tailoring, sewing and dressmaking have the most prominence by reason of the number pursuing them.

The number represented in the table as being taught an industry is 2,743. Of these 16 per cent. were receiving instruction in printing, 19 per cent. in carpentry or joinery, and 22 per cent. in shoemaking. The Office can now state, what it found itself unable to give in the last report, that shoemaking is the most largely followed of the several trades for the deaf, that it is closely followed by the trades of carpentry and joinery considered as one, and this, with an equally small interval, by printing; the three trades, calling carpentry and joinery one, having 57 per cent. of the whole number receiving industrial instruction.

These 2,743 pupils are taught by 175 teachers, of whom 37 per cent. are females. This would make 15.5 pupils to a teacher, but an inspection of the table will show that this can not be taken as a "typical" number, that is, it is nothing more than an average.

Five hours is the time devoted to school work; this is quite plainly shown, but the average time devoted to industries is not so apparent. The full employment of shop foremen, and it is very desirable that he should be wholly employed by the institution, has tended not a little, according to Dr. Fay, to an undue extension of the daily time of the pupil. The question on our blank form, the answers to which are tabulated in Columns 9 and 10, reads as follows: Number of hours devoted to school, —; to industries, —. Perhaps the question was not adapted to the purpose intended; that is, to bring out how many hours daily the pupil spent in school and how many in the workshop.

From two to three hours, in about 80 per cent. of the institutions reporting industries, is the time devoted to such work. In several instances it is four or over. Whether this is to be explained on the ground given by Dr. Fay, or has arisen from a misunderstanding of the inquiry, or from the peculiar manner of dividing the pupils' time, or whether it needs no explanation, we cannot say.

It is to be noted that several of the pupils of the Chicago day schools and of those of the Horace Mann School, Boston, receive instruction at the manual training school of those cities respectively, and that the pupils of the Chicago Voice and Hearing School are taught wood carving, designing, and modelling, etc., and those of the Private School of Philadelphia the use of wood and metal working tools. The day schools with these exceptions make no return of industrial work, or, perhaps it should be called, in the cases reporting, manual training.

IN SCHOOLS FOR THE BLIND.

Music being taught primarily as a means of livelihood in after life, the blind school has two species of technical training running concurrently with the school department.

The piano and the organ are the instruments most used, and as both are costly the thorough equipment of a school with these means of instruction is very great, to say nothing of the repairing and replacing of them when old. The noise of the constant practice is also an unpleasant feature, and extraordinary methods of construction, likewise expensive, are necessary to obviate this.¹ For the study of musical acoustics the pianotuner must have an expensive apparatus at his command, and to become an artist he must, if not a genius, have an artist as an instructor, the most costly feature of all. It will be at once apparent that the establishment and maintenance of a first-class school for the musical instruction of the blind is a very costly undertaking.

But the cost of establishment and maintenance is dwarfed by the amount of patience and labor required from the pupil to master his profession. We translate from Monsieur Guadet's article on the blind in the *Dictionnaire de Pédagogie*: "The scale is not for the blind what it is for the seeing. There is more head-work and less 'practice,' but the exercises are more analyzed, the composition and dismemberment of phrases more thorough. The professor executes on his instrument the most complicated phrases, and the pupils must tell all the details. This is called phrasing. In these same classes the students are exercised each day in chorus singing. As instrumental music the pupil studies on the piano by means of music written in the Braille system. He reads with the left hand for a phrase the part that the right hand performs, then he reads with the right hand the part that the left performs; then the two parts, retained by the memory, are performed in concert."

"The orchestra of the Paris institution produces with the same number a better effect than an orchestra of seeing performers, and this is the reason: The blind, in addition to the innate predisposition to music existing in many, having no occasion to turn pages, but playing from memory, can give their attention to execution. After each part has

¹ See Commissioners' Report, 1886-87, p. 839.

² Long the principal of the Paris school.

been learned in private it has been connected with the parts of the other performers so inseparably that it is only this connection that remains in the performer's head and he executes it with feeling and with his whole soul."

As to the methods of the industrial department there seems to be no objection raised against them, the whole attention of the friends of the blind being given to solving the problem of providing workshops for the adult blind. As this was noticed at some length in the report preceding this,¹ the reader is referred to it.

TABLE 81.—Statistics of the Music and Industrial Departments of Schools for the Blind.

Name of School (full name and the location given in Table 92).		Music Department.					Industrial Department.					Duration of Occupation in Hours.	
		Instruc-tors.		Pupils in—			Instruc-tors.		Pupils in—				
		Male.	Female.	Vocal Culture.	Instrumental Music.	Tuning.	Male.	Female.	Broom-making.	Chair Caning.	Other Trades.	Music.	Industries.
1	2	3	4	5	6	7	8	9	10	11	12	13	
1	Alabama Academy.....	1	0	25	20	0	0	0	15	.....	6	2
2	Arkansas School.....	1	1	60	30	12	1	1	8	4	6	8	
3	California Institution.....	1	0	20	20	0	0	0	0	0	3	0	
4	Colorado Institution.....	0	1	24	18	0	1	1	0	7	3	3	
5	Florida Institute.....	0	0	0	0	0	0	0	0	0	.....	2½
6	Illinois Institution.....	2	2	40	100	8	1	2	20	10	0	6	
7	College for the Blind.....	2	1	100	125	8	1	2	12	0	90	5	
8	Kansas Institution.....	0	2	54	54	3	1	0	20	10	5	12	
9	Kentucky Institution.....	1	1	80	43	0	1	1	22	28	12	3	
10	Maryland School.....	2	1	39	40	8	3	1	11	13	6	5	
11	Maryland School for Colored.....	1	0	15	10	0	1	1	4	9	3	3	
12	Perkins Institution.....	8	4	109	113	15	3	2	8	49	70	.....
13	School for Blind, Lansing.....	1	2	8	43	10	1	1	30	0	0	1½	
14	Minnesota School.....	1	2	46	48	1	1	1	22	0	0	.....
15	Mississippi Institution.....	0	1	23	19	0	1	1	10	12	0	8	
16	Missouri School.....	2	1	13	62	9	1	1	24	11	17	8	
17	Nebraska Institution.....	0	2	6	31	0	0	1	0	0	0	8	
18	New York State Institution.....	2	4	40	90	11	3	1	10	17	0	5	
19	New York Institution.....	1	6	157	122	54	2	5	0	50	6	½-8	
20	North Carolina Institution.....	1	3	6	30	5	1	1	12	12	0	6	
21	Ohio Institution.....	4	5	40	153	23	2	3	42	29	0	9	
22	Oregon Institute.....	0	1	1	9	0	0	0	5	0	0	6	
23	Pennsylvania Institution.....	7	3	103	92	25	4	4	29	36	9	.....
24	South Carolina Institution.....	1	0	15	16	6	1	1	9	9	8	3	
25	Tennessee School.....	1	0	60	50	6	1	2	10	6	5	1-2	
26	Texas Institution.....	2	2	10	53	8	1	0	19	29	6	6	
27	Virginia Institution.....	2	1	36	45	4	2	1	10	12	20	7	
28	West Virginia School.....	1	1	15	25	0	1	1	7	3	16	5	
29	Wisconsin School.....	0	2	54	65	1	1	2	8	25	35	8	
Total.....		45	49	1,204	1,531	217	36	37	352	396	322	.....

a "Number taught as such."

With the exception of the Florida institution, instruction in music is given by all the institutions in the table, and with the exception of the Florida, California, and the Nebraska institutions, all have industrial instruction. In the music department there are 94 teachers, in the industrial 73; in both females are slightly in excess.

The statistics contained in Columns 4, 5, and 6 are not, it is thought, mutually exclusive; there is nothing in the study of vocal music that excludes the study of an instrument or in either that excludes the study of piano tuning. In the case of Columns 9, 10, and 11, however, it is believed that those engaged at broom-making are not included in the number given as engaged in seating chairs, etc. The question, however, arises how many of those studying instrumental music are included in the number of those following trades. Taking the total number studying instrumental music as represent-

¹ Page 833, under Workshops for Blind, and page 839, under Conventions.

ing the maximum attendance in the department of music and adding to this the number pursuing trades, the result rises several hundred above the total attendance of the institutions represented. The question is still further complicated by those too young to work being included in the attendance, and by the presence of female pupils.

Under these circumstances it is of very little use to make comparisons between the two departments of work; and as it is perfectly conceivable for the same pupil to sing, play, and tune, it would also be unprofitable to examine into the relations of the statistics of Columns 4, 5, and 6. To obtain unimpeachable data for such an undertaking would require more minute inquiry and, therefore, more trouble to the superintendents than the results would warrant. But it is perfectly proper to compare the statistics of the tuning branch of the musical department with the statistics of the other trades taught. The total of the four columns involved is 1,287; of these 30 per cent. are at cane seating; 27 per cent. at broom-making; 17 per cent. at tuning, and 25 per cent. at other trades.

If it be assumed that the number playing instruments is approximately the number in the music department, there would be indicated 16 pupils to every teacher. In the industrial department the total number of students, if divided by the number of teachers, gives 14+.

In considering the columns giving the time devoted to the two departments it is necessary to read the numbers in the columns as though they answered the question, How many hours does the music pupil devote to music; how many does the industrial pupil give to industries? When the figures are large it is assumed that practice time is included. Three or four hours seems to be the time generally devoted to industries, and six to eight in music, but it was impossible for the superintendents to give the many and varying periods of time allotted to each of three departments, especially when instruction in one of them is so individual as is the teaching of instrumental music.

IN SCHOOLS FOR THE FEEBLE-MINDED.

Most public schools of this kind have two departments—school and asylum. It has been found profitable to add to the usual school work some form of manual labor, and this has resulted, at the Kentucky institution at least, in the pupils acquiring considerable proficiency.¹ Farming is the occupation most adapted to the feeble-minded, but carpentry, broom, mattress, and shoe making, and for the girls, sewing, are very generally introduced. As in the case of the blind, though for an obviously different reason, the attention of those having the care and, as far as possible, the education of the feeble-minded is directed towards providing homes for them, in which they are to work and make themselves as useful as possible. The loss of sight makes the blind man a poor business man, while the weak intelligence of feeble-minded persons causes them to become the victims of the unscrupulous or of their own passions.

¹ The experiment at the Kentucky institution is given in the report preceding, p. 759.

TABLE 82.—*Statistics of Schools for the Feeble-Minded.*

	Name of School (full name and location given in Table 94).	Industrial Instructors.		Pupils.	Duration of Work in Hours.		Occupations.
		Male.	Female.		School.	Industries.	
	1	2	3	4	5	6	7
1	California Home	5	6	15	6	6	Carpentry, wood-carving, and farming.
2	Connecticut School.....	0	0	0	4½	0	
3	Illinois Asylum.....	3	2	104	5½	6	Shoe making, farming, dress-making.
4	Indiana School.....	2	2	15	6	8	Shoe making, dressmaking.
5	Iowa Institution	1	0	40	6	3	Broom and shoe making, carpentry.
6	Kansas Asylum.....	1	0	30	5	5	Farm and house work.
7	Kentucky Institution.....	3	1	85	4	4	Shoe and broom making, carpentry.
8	Font Hill Institution.....	1	3	6	6	4	Carpentry, farm and house work.
9	Home School.....						
10	Institution at Barre, Mass.....	4	3	29	5½	2	Garden and house work.
11	Hillside School.....			4	4	4	Agriculture.
12	Massachusetts School.....	2	2	74	6	6½	Broom and mat making, farming.
13	Wilbur School.....	2	3	39	5	2	Farming and sewing.
14	Minnesota School.....	2	1	0	6	3	Farming, brush-making, etc.
15	Nebraska Institution.....	0	0	0	6	0	
16	New Jersey Home	1	0	8	5	3	Farming and housework.
17	New York Custodial Asylum...	0	1	80	2	4-5	Housework and sewing.
18	New York Asylum	3	5	60	5	5	Brush and shoe making, carpentry, etc.
19	Sequin Physiological School						Fancy work for girls.
20	Ohio Institution.....	8	5	102	5½	8	Tailoring, shoe making, carpentry, etc.
21	Pennsylvania School	3	6	322	6	9	Shoe and mattress making, carpentry.
	Total.....	41	40	1,013			

The teaching force in the above class of schools is equally divided between the sexes, and gives, if averaged, about 13 pupils to a teacher, the number of pupils being 1,013. As the pupils are graded by intelligence so is the work distributed; the more intelligent doing carpentry, the next lower shoemaking, and the third class broom and mattress making. The whole number reported as in these institutions is 4,321, of whom about 25 per cent. are receiving some kind of industrial training. Five or six hours of the day are given to school work and 4 to 6 to work.

IN REFORM SCHOOLS.

As the State in exerting its unquestioned right to seize and hold the juvenile offender or vagabond intends to return him to society, what excuse, especially in the latter case, can be offered for compelling him to live with criminals and for returning him finally able to read and write perhaps, but without an occupation? The great cry for manual training, by a great many understood in the sense conveyed by "industrial training," is everywhere heard to prevent boys being sent forth into the world with the elements of learning, but without the elements of a handicraft. The aid of the state is invoked to furnish the means of giving industrial training to those who have parents and friends, but here, where paternal authority has been legitimately assumed to the extent of depriving the petty juvenile thief or, as in most cases, the vagabond of his liberty, very little industrial training obtains. Not that work has not been furnished; the contract system has provided for that.

The distinguishing characteristic of the contract system is the amount the State can get from the contractor and the contractor out of the boys. "The interest of the contractor," says a committee in New York appointed to investigate this method several years ago, "and the terms of his contract may require that certain prisoners shall be employed at a particular kind of work as long as practical, while the interest of the pris-

oner and the proper conditions of his reformation and transformation into an industrious and worthy citizen may require that he should be put at a different kind of labor." It is true that contract labor is rapidly becoming a thing of yesterday, but now as it passes out of existence, in each particular instance, the superintendents are compelled to see even this wretched substitute for industrial training taken from their school without means to provide the proper kind, and are inclined to think, with the superintendent of the Illinois school, that "the money required to carry on such industries with but little prospect of profitable return on a currency basis is the only apparent obstacle to technological labor in a reform school."

TABLE 83.—Statistics of Reform Schools for 1887-88.

Name of School (full name and the location given in Table 96).	Instruct- ors.		Pupils Employed in—				Duration of Work in Hours.	
	Male.	Female.	Agriculture.	Carpentry and Joinery.	Shoemaking.	Other Occu- pations.	School.	Industries.
1	2	3	4	5	6	7	8	9
1 Colorado Industrial School.....	9	5	123	10	15	30	4	5½
2 Connecticut Reform School.....	10	0	40	0	10	377	3	5
3 District of Columbia Reform School.....	7	0	50	0	4	15	3½	3½
4 Indiana Reformatory for Females.....	0	9	0	0	0	.....	6	6
5 Indiana Reform School.....	7	5	0		(642)		4	4
6 Kansas Reform School.....	6	3	140	0	0	51	4½	4½
7 House of Good Shepherd (for females).....	0	16	0	0	0	0	4	10
8 New Orleans House of Refuge.....	6	0	0	0	90	0	4	6
9 Maine Reform School.....	6	3	40	36	0	138	4	6
10 Maryland Reform School for Colored.....	7	2	45	2	14	0	4½	4½
11 St. Mary's Industrial School.....	3	0	10	6	37	257	3½	6
12 Marcella Street Home.....	0	2	0	0	0	0	4	.....
13 Deer Island Reform School.....	5	1	0	0	0	12	5	12
14 Truant School.....	0	0	0	0	0	0	5	0
15 Massachusetts Industrial School for Girls.....	2	4	145	0	0	0	4	7
16 Lawrence Industrial School.....	2	0	33	0	0	0	3½	4½
17 Lowell Reform School.....	2	0	38	0	0	0	5	2
18 New Bedford Truant School.....	6	0	0	0	0	0	5	0
19 Cambridge Truant School.....	1	0	23	0	0	0	4	4
20 Massachusetts "Primary School".....	5	10	50	0	4	1	5	3½
21 Plummer Farm School.....	2	2	42	8	0	0	4	6
22 Lyman School.....	2	0	229	8	4	8	4	6
23 Worcester Truant School.....	0	0	0	0	0	0	5	0
24 Michigan Industrial School for Girls.....	0	8	0	0	0	0	3½	5
25 Michigan Reform School.....	19	9	100	0	10	200	4½	4½
26 Minnesota Reform School.....	5	4	125	75	8	45	4½	4
27 St. Louis House of Refuge.....	14	7	5	0	75	39	4	7
28 Nebraska Industrial School.....	5	8	161	16	21	15	4	4
29 New Hampshire Industrial School.....	4	4	15	2	2	0	4	5
30 New Jersey Reform School.....	15	2	.....	.....	.....	4	3½	6
31 New Jersey Industrial School for Girls.....	0	4	0	0	0	40	6	.....
32 Newark City Home.....	3	1	15	0	0	238	3	3-4
33 Juvenile House of Industry.....	9	0	0	0	0	0	5	0
34 Burnham Industrial Farm.....	3	2	7	3	0	3	5½	4
35 New York Reformatory (for Men).....	10	0	50	25	12	175	1½	1½
36 New York Juvenile Asylum.....	14	18	25	4	20	153	5	3
37 New York House Refuge.....	22	8	13	40	0	559	4	6
38 New York Catholic Protectory.....	31	19	16	0	274	955	5	4½-5
39 Cincinnati House Refuge.....	4	2	0	0	0	0	3	6
40 Ohio Industrial School.....	14	5	100	0	16	300	5	5
41 Pennsylvania Reform School.....	3	1	238	5	15	390	5	5
42 Philadelphia House of Refuge.....	15	11	0	4	113	.....	3	6½
43 Sockanosset School.....	2	0	10	0	0	140	3	6½
44 Vermont Reform School.....	0	0	.....	.....	.....	121	5	5
45 Wisconsin Industrial School for Girls.....	0	8	.....	.....	.....	.....	5½	6
46 Wisconsin Industrial School.....	28	14	40	8	110	0	5	4
Total.....	293	197	1,990	252	854	4,317	.....	.....

As a trade, properly so-called, for boys detained in a reform school, shoemaking is the most extensively followed, carpentry coming far behind in point of numbers, the percentages being 12 and 3 respectively of the total number reported. If the decided manifestations of a desire to introduce manual training into these schools, for industrial pur-

poses, continues this great disparity will soon disappear. There is this, however, to be said in favor of shoemaking as opposed to manual training, it is a trade. When the student is dismissed he has learned, his term of confinement and the character of the instruction permitting, to do one thing and not the underlying principles of all mechanical things. In a word, he has a means of livelihood.

In the column headed "agriculture" we find about 2,000 pupils, 27 per cent. of the whole number. Whether these boys can be said to be learning a trade, i. e., making themselves proficient in a useful occupation, or are merely to be considered as employed about the farm, (these schools have very generally that feature to occupy their time) is more than this Office can say. It would seem that the agricultural instruction given is very far from being that which obtains at real agricultural schools.

Nearly 59 per cent. of the pupils, boys and girls, are not in the three occupations which the Office, rightly or wrongly, supposed to be the most generally followed when making up its form of inquiry. There are 12 remarkable instances of this divergency, and we proceed to investigate them.

In the case of the Connecticut Reform School the great majority of the boys are employed at cane-seating, 225 for the present year, and it seems to be very much the same at the Maine School at Cape Elizabeth. At the St. Mary's School 144 of the pupils are employed in cigar-making and 104 in tailoring and 14 in the printing office. At the Michigan School printing is taught and the boys are employed in mending the clothes worn by the inmates and in making the repairs incidental to the heating and lighting of the building. At the Newark City Home brush-making is extensively followed. At the New York Juvenile Asylum tailoring is taught; at the New York House of Refuge hosiery and painting, and at the Catholic Protectory tailoring, printing, and cane-seating. At the Ohio Industrial School brush-making, hosiery, printing, and tailoring are taught. At the Pennsylvania Reform School brush-making is taught to a large number. At the Sockanosset School brush-making, printing, and tailoring are taught, and at the Vermont School cane-seating is the only occupation. In the greater number, if not all, of these schools the pupils do the baking, laundry work, etc.; these, however, can hardly be called trades.

We have hinted above of the encouraging growth of real technological instruction in these schools (polytechnic shops as the Ohio School superintendent calls his) stimulated by the agitation of the subject of "manual training" in the community and the abrogation, gradual but sure, of the contract system. We can not discuss this growth here, but will return to the subject in future reports.

In considering the columns in which are given the instructors, classified by sex, it appears that the female element in many instances is quite prominent in schools for boys only.

In our opinion Column 8 is the most important of the table; but as it has been introduced here merely as a complement to Column 9 we will confine ourselves first to discussing the two as one whole and then the latter by itself.

About 78 per cent. of the schools reporting devote from eight to ten hours daily to school and to shop or other work. Of these about a third require eight but less than nine hours of mental or manual employment. In a number of cases the time is equally divided; where a disparity occurs most frequently the longer time is in the column showing the duration of work in industries. We note that at the Burnham Industrial Farm, the establishment of which we had the pleasure of noting in our last report, that five and a half hours are devoted to school and four to industrial work, and at the Massachusetts Primary School the periods for school and shop are respectively five and three and a half.

The time given at the several institutions to industrial employments in 78 per cent. of the schools is from four to six hours. Of these the cases in which the time is four but less than five hours are about one-third of the whole number. In the manual training school, where half of the day is spent in the shop, the time is about two hours at physical labor; in the public schools of lower grade the time is much less.

"INDUSTRIAL SCHOOLS."

The somewhat anomalous class of schools contained in the following table are mostly for the poor and friendless. There are many more of them from which statistics have not been received; indeed the list could be swelled indefinitely. The life of these schools is rather ephemeral in many instances, and their character more distinctly indicated by the word "protective" than by "educational" or "industrial." Owing their foundation and maintenance to private charity, they differ considerably in methods of management and government. The character of the schools as charitable institutions indicates a strong religious sentiment in the persons by whom they are supported, and it is only natural to suppose that in them the spiritual as well as the intellectual and physical needs of the pupil is cared for.

To classify the immense number of schools of this and several similar kinds will be one of the duties of the Office during the ensuing year.

TABLE 84.—*Statistics of Industrial Schools.*

	Post-Office Address.	Name.	Superintendent.	Year of Estab- lishment.	Age of Ad- mission.	Instructors.	Pupils.		Income.	Expenditure.	Volumes in Library.
							Male.	Female.			
1	Little Rock, Ark.....	Adeline Smith Industrial Home *	Miss E. H. McIntosh.....	1884	13	2			\$1,173	\$1,141	125
2	Atlanta, Ga.....	Clark University Industrial School.....	E. O. Thayer, president.....	1880	14	8	62	150	3,000	3,000	.....
3	Thomasville, Ga.....	Normal and Industrial School.....	Mrs. W. L. Gordon.....	1886	5	7	149	218	.....	.....	.....
4	Peekanyville, Ill.....	St. Mary's Training School *	Brother Leo.....	1882	6	23	244	.....	21,000	20,800	100
5	Brookline, Mass.....	Vacation Industrial School *	School Committee.....	1881	10	4	45	75	500	500	0
6	Boston, Mass.....	North End Mission Industrial Schools.....	C. L. D. Younk.....	1870	7-14	44	0	230	.....	.....	0
7	Dorchester, Mass.....	North End Industrial School.....	Mrs. L. B. Clark, matron.....	1874	8	2	0	27	4,565	4,474	.....
8	Roxbury, Mass.....	Southern Christian Institute.....	Miss S. A. M. Edes.....	1884	7	6	50	200	3,000	3,000	500
9	Edwards, Miss.....	Tougaloo University.....	Jephthah Hobbs.....	1882	3	6	33	20	1,700	1,700	500
10	Tougaloo, Miss.....	St. Joseph's Industrial School.....	Frank G. Woodworth, president.....	1869	.....	17	146	180	25,138	24,651	500
11	Albany, N. Y.....	Industrial School Association.....	Sister Bernardine.....	1843	5	9	0	28	.....	.....	400
12	Brooklyn, N. Y.....	St. Paul's Industrial School.....	Miss M. E. Whitelacy.....	1854	2	4	123	72	19,433	18,044	400
13	Brooklyn, N. Y.....	The Brooklyn Industrial School Association.....	Sister Maria Louise.....	1834	14	16	0	180	21,539	20,699	424
14	Brooklyn, N. Y.....	Children's Aid Society Industrial School.....	Miss M. R. Bailey, matron.....	1854	5	3	100	60	53,710	43,531	200
15	New York, N. Y.....	Five Points House of the United Hebrew Charities.	J. W. Skinner.....	1825	5	103	6,660	4,161	104,303	104,303	1,599
16	New York, N. Y.....	Home Industrial Schools of American Female Guardian Society.*	William F. Barnard.....	1880	5	10	702	494	37,469	43,609	1,000
17	New York, N. Y.....	Industrial School of St. Augustine's Trinity Parish.*	Eliza Woodie.....	1880	10	6	54	123	.....	.....	.....
18	New York, N. Y.....	Wilson Industrial School for Girls*.....	Mrs. C. C. North.....	1851	5	52	2,533	2,427	18,691	41,903	2,447
19	New York, N. Y.....	Industrial Benevolent and Scientific School of Sisters of Mercy.*	Miss M. P. Darby.....	1870	6	53	0	613	600	600	.....
20	New York, N. Y.....	Industrial School and Home.....	Mrs. J. Sturges.....	1852	5	4	0	200	8,000	8,000	.....
21	Rochester, N. Y.....	The Sewing School of the Presbyterian Church.*	William Sampson.....	1872	10	.....	0	60	4,924	4,509	200
22	Cleveland, Ohio.....	Schoolfield Normal and Industrial School *.....	Mrs. C. A. Ewing.....	1855	7	9	132	42	.....	11,100	.....
23	Marietta, Ohio.....	Slater Training School *.....	Martha Schofield.....	1876	.....	2	27	20	20	20	.....
24	Alken, S. C.....	.....	Emily L. Austin.....	1893	6	7	110	140	4,000	4,000	500
25	Knoxville, Tenn....	.....	.....	1890	.....	6	.....	.....	3,000	3,000	200
Total.....		.....	.....	.....	.....	408	{ 11,193	{ 9,733	{ 337,818	362,555	8,685

* For the year 1890-97.

II.—TRADE SCHOOLS.

Three important schools have been established during the year—the Williamson School, to be located either in or near Philadelphia, the Rindge School of Cambridge, Mass., and the Pratt Institute of Brooklyn.

THE WILLIAMSON SCHOOL.

The plans and purposes of Mr. G. V. Williamson, who lately announced his purpose to establish and endow a great trade school, are fully set forth in the statement which he has caused to be published in Philadelphia. The Pennsylvania Company for Insurance on Lives and Granting Annuities is made the fiscal trustee to hold the fund with which the school is endowed. This fund consists of securities amounting, at their par value, to \$1,596,000, but of an estimated worth of \$2,225,000. This fund, under the deed of trust, is to be appraised and then divided as nearly as may be into two parts. One-fifth is to be composed of securities which are easily and advantageously salable, and will constitute the building fund. The remaining four-fifths will go to the endowment fund. With the consent of the seven trustees the fiscal trustee is empowered to sell any securities and reinvest the proceeds as may seem desirable. Provision is made for the merging of any funds that may hereafter be devised or given to the school.

A body of land not exceeding 300 acres is to be purchased, lying either in Philadelphia or in Bucks, Delaware, or Montgomery Counties, but there is a further provision that not more than \$400 per acre shall be paid. After giving directions for the selection of a healthy neighborhood and the erection of fire-proof buildings, the deed says:

"I leave to the judgment and discretion of the trustees the character, number, and extent of the said buildings to be erected, but, as the great object to be attained is to board, lodge, clothe, educate, and instruct in mechanical trades those who, when arrived at manhood, will be obliged to labor with their hands for their support, I particularly direct that all palatial structures, expensive materials, and elaborate ornamentation or decoration shall be avoided, so that the scholars may not, by reason of luxurious or expensive accommodations and surroundings, acquire tastes or habits which may unfit them for their trades in the sphere of life in which their lots are to be cast."

After referring to the appointment of teachers, officers, and agents, all of whom are to be selected by the trustees, specifications are given as to the admission requirements.

"When the school is prepared to receive scholars, the trustees shall from time to time receive and admit to the school as scholars as many able-bodied and healthy young male persons of good moral character, of such ages between 12 and 18 years, as may from time to time be determined by the trustees, as in the opinion of the trustees the extent, capacity, and income of the school will provide for. Preference shall be given in the admission of scholars: First, to those born in the city of Philadelphia; second, to those born in the county of Bucks, State of Pennsylvania; third, to those born in Montgomery or Delaware Counties, Pennsylvania; fourth, to those born elsewhere in Pennsylvania; fifth, to those born in the State of New Jersey; sixth, to those born elsewhere in the United States. And in all cases, other things being equal in the order of preference, the preference shall always be given to the poor. But I especially direct that no scholar who has been properly admitted with reference to the order of preference shall thereafter be displaced to make way for any later or subsequent applicant who may be higher in the order of preference hereinabove directed to be observed. And the decision of the trustees as to the number of scholars to be admitted, and as to the conflicting claims of any or all rival candidates for admission, shall be final and conclusive upon all parties. All scholars admitted to the school shall be bound as indentured apprentices to the trustees, by their parents or guardians or other competent authority, for such respective periods as the trustees may from time to time determine; provided, that no indenture shall be for less than three years nor extend beyond the minority of the scholar.

"Each and every scholar shall be compelled to learn and be thoroughly instructed in one good mechanical trade, so that when they leave the school on the completion of their indentures they may be able to support themselves by the labor of their own hands. I leave it to the discretion of the trustees the selection of the several kinds of mechanical trades to be taught, and the determination of the particular one that shall be taught to and acquired by each scholar, but I particularly desire that the taste, capacity, intelligence, and adaptability of each scholar be ascertained and considered before assigning him to any particular trade.

"Among the trades which may be taught are those of a baker, blacksmith, bricklayer, butcher, cabinet-maker, car builder, carpenter, carriage-maker, coppersmith, the crafts of constructing, managing, and repairing electrical appliances and apparatus, foundryman, gasfitter, goldbeater, harness-maker, hatter, locksmith, machinist, marble mason, moulder, painter, paper hanger, pattern-maker, plasterer, plumber, printer, saddler, shoemaker, steam engineer, slater, stone-cutter, stone-mason, tailor, tiller, tinsmith, turner, wheelwright, and many others. In mentioning these several trades I

do not intend to make it obligatory upon the trustees to teach all of them, nor do I intend to exclude any of those which are not mentioned, and I authorize the trustees, to the extent that the cultivation, care, and adornment of the lands and grounds connected with the school will admit, to instruct such of the scholars as show taste and capacity for the occupation in the art of farming and gardening, or either.

"I desire and direct that the moral and religious training of the scholars shall be properly looked after and cared for by the trustees, but there shall be no attempt by the trustees at proselytism among the scholars, and no favoritism shown by the trustees to any particular sect or creed. I especially direct that each scholar shall be taught to speak the truth at all times, and I particularly direct and charge as an imperative duty upon the trustees that each and every scholar shall be thoroughly trained to habits of frugality, economy, and industry, as, above all others, the one great lesson which I desire to have impressed upon every scholar and inmate of the school is that in this country every able-bodied, healthy young man who has learned a good mechanical trade, and is truthful, honest, frugal, temperate, and industrious, is certain to succeed in life, and to become a useful and respected member of society."

Provisions are also made for the publication of the trustees' accounts in the newspapers in order that the condition of the institution may be full known, and it is further provided that a record shall be kept of graduates, showing their occupations and facts bearing on their success in the world for at least ten years.

THE RINDGE SCHOOL.

The object of the Rindge School, lately presented to the city of Cambridge, Mass., is thus indicated by the donor:

"I wish the plain arts of industry to be taught in this school. I wish the school to be especially for boys of average talents, who may in it learn how their arms and hands can earn food, clothing, and shelter for themselves; how, after a while, they can support a family and a home; and how the price of these blessings is faithful industry, no bad habits, and wise economy, which price, by the way, is not dear. I wish also that in it they may become accustomed to being under authority, and be now and then instructed in the laws that govern health and nobility of character. I urge that admittance to said school be given only to strong boys who will grow up to be able working-men. Strict obedience to such a rule would tend to make parents careful in the training of their young, as they would know that their boys would be deprived of the benefits of said school unless they were able-bodied. I think the industrial school would thus graduate many young men who would prove themselves useful citizens."

MORAL FEATURES OF THESE SCHOOLS.

It will be observed that both Mr. Williamson and Mr. Rindge discriminate as to the condition of the boys to be admitted to their respective schools. First, they are to be able-bodied; secondly, in the Williamson School there are to be taught those mechanical trades which will enable "those who, when arrived at manhood, will be obliged to labor with their hands for their support" to gain a livelihood, and all tending to unfit them for "their trades in the sphere of life in which their lots are to be cast" is to be avoided, and in the Rindge School the benefits are "for boys of average talents who may in it learn how their arms and hands can earn food, clothing, and shelter for themselves." At the Williamson School "each and every scholar shall be compelled to learn and be thoroughly instructed in *one good mechanical trade*," not in the underlying principles of *all trades*. Not only is the trade instruction to be definite, thus securing the graduate immediate rather than potential ability, but it is especially directed by Mr. Williamson that habits of frugality, economy, and industry be inculcated, as the one great lesson above all others which the founder desires to impress upon those for whom he is providing is "that in this country every able-bodied, healthy young man who has learned a good mechanical trade, and is *truthful, honest, frugal, temperate, and industrious*, is certain to succeed in life, and become a useful and respected member of society;" and Mr. Rindge says the same. It requires something more than a trade to succeed, those gentlemen think.

The two practical business men whose schools we have just spoken of emphasize industry, frugality, and honesty as the price—which, by the way, is not dear, says Mr. Rindge—of success. A third, also a founder of a recently-established industrial school, equally a public benefactor and a successful man of business—it will be remembered that we are not speaking of academic or peripatetic philosophers or those thinkers who, as Sir George Cornewall Lewis says, write history as though a popular assembly were not to be seen—would emphasize another, if possible, still more important element of success, and that is self-respect. The magnificent creation of Mr. Pratt "offers its advantages to those only who propose to do their own part earnestly and well. Its aim is to aid those who are willing to aid themselves. Its classes, work-shops, library, reading-room, and museum are for this purpose, and while tuition is required, yet it will be the endeavor to make possible by some means *consistent with self-helpfulness and self-respect* the admission of every worthy applicant."

THE PRATT INSTITUTE.

We have already spoken of the manual training department of this school when treating of the schools on the Russian system (see page 894). The institute as a whole will now be considered.

The institute has been established after many years of study on the part of the founder, Mr. Charles Pratt, of Brooklyn. Its object is to promote manual and industrial education, and to supplement the latter by advanced work in science and art.

It has been shown (p. 891) that the founder views manual training as education; and from what follows it will be seen that he favorably regards it as industrial education—the direct fitting of men and women for earning their daily bread; but it is doubtful if he believes in engrafting industrial education, perhaps even manual training, on the public school system. He says:

“The question of incorporating *manual training* into the public school system of the country has for years deeply interested educators, but there have been great practical difficulties to overcome in demonstrating the best way of accomplishing the work on a scale commensurate with its importance;” and then dismissing the subject of manual training immediately turns to the consideration of the industrial education, using this language: “The need of manual training as a developing power is scarcely less than that of industrial education—such education as shall best enable men and women to earn their own living by applied knowledge and the skilful use of their hands in the various productive industries. Accordingly, the institute seeks to provide facilities by which those wishing to engage in mechanical or artistic pursuits may acquire a thorough theoretic and practical knowledge thereof, or may perfect themselves in that occupation in which they are already engaged.”

By the side of the two-story building described on p. 895 as containing the metal and wood working shops, and connected with it, is the building, 103 by 95 feet and about 30 feet high, containing the Department of Building Trades. Work was commenced in February, 1888, with pupils in bricklaying, stone carving, plumbing, and modelling. In the bricklaying department the pupil is first taught to handle the trowel and spread mortar, and then put upon building walls, advancing to arches, etc. In stone carving the pupil is first employed in working out architectural ornaments, sketching and modelling them first. Fifty-four benches are provided for pupils in plumbing, attention being given to the hygienic features of the trade.

Had this volume a chapter devoted to schools of art, in it would properly fall an account of most of the work done in the main building of the Pratt Institute. This building is 100 by 86 feet and six stories high. Its first story is devoted to books and readers, the second to a lecture hall and to a reception and other incidental rooms, the third to art embroidery, dressmaking, and sewing, the fourth to drawing, painting, and modelling, the fifth to a technical museum, and the sixth to cooking and an art hall.

The library, at first intended merely for the students, contains 12,000 volumes, which are loaned to persons over 14 who have gone through a form of application easily accomplished, if the applicant be respectable. It was first opened to the public February 1, 1888, during which month 3,708 books were circulated. In April the circulation had grown to 7,408.

The sewing class numbered 24 when organized in February. An evening class was organized, and in April one for school children on Saturday. Instruction in all kinds of hand sewing is given. Three classes in millinery and three in dressmaking have been formed, and others in art embroidery contemplated. The rooms of the cooking school are upon the uppermost floor. The three day classes, of 25 each, are open to all; the evening classes are reserved to self-supporting women. There are three courses of 12 lessons each, and when they have been completed it is expected that the pupil will know not only the art but the science of cookery. In front of the cooking rooms is a lunch room where, for a small sum, a well served meal is furnished for the teachers and students of the institute.

The school of art and design occupies the entire fourth floor. “Drawing,” says the catalogue, “is fundamental; it is the basis of all the constructive industries, all pictorial art and decorative design. It is the one universal language, and its importance to the designer and artisan is only comparable with reading and writing. Its applications are various and almost innumerable; but the subject, considered as a whole, may be regarded as embracing three divisions, which include all the constructive, representative, and decorative arts, namely: Construction, as applied in industrial construction and the making of objects; representation, as applied in representing the appearance of objects and of nature; decoration, as applied in ornamentation. The purpose of this department is to give thorough and systematic training in each of these divisions, which may be specialized under the heads of freehand, mechanical, and architectural drawing, color, clay modelling, design, wood-carving,” etc. The first class of 12 was enrolled in October, 1887, and in January, the electric lighting apparatus being in place, evening classes were enrolled. In March the day classes numbered 133, the evening classes 174.

During the past year a plumbing class has been carried on of evenings in Washington, D. C., under the auspices of the Plumbers' Association, and through the courtesy of Mr. Auchmuty, of New York, we are informed that a trade school similar to his will be opened by the Builders' Exchange, in Philadelphia, January 2, 1889.

THE NEW YORK TRADE SCHOOLS.

"The New York trade schools," says the founder, "were established 7 years ago for the purpose of giving young men instruction in certain trades and to enable young men already in their trades to improve themselves."

"Since the New York trade schools were established a great interest has arisen in industrial training. Seven years ago but little had been written on technical education; it has now a literature.

"The master mechanics in various trades have, at their various association meetings during the past few years, advocated the establishment of trade schools as necessary for the proper acquiring of the trades. Since the plumbing class was opened at the New York school, plumbing schools on the same plan have been established by the master plumbers' associations of Chicago, Montreal, and Philadelphia. At the last convention of the National Association of Master Builders the report of the committee on apprenticeship, recommending that a lad should learn the science and practice of his trade at a trade school before being employed in the workshops, was unanimously adopted.

"The trades unions, thus far, have shown no interest in, or have been openly hostile to, technical education for boys or young men."

The requirements for admission are simple. The pupil must be between 17 and 21 years of age. During the year 469 pupils attended, distributed thus:

Plumbing.....	184
Bricklaying.....	120
Painting.....	33
Tailoring.....	31
Carpentry.....	28
Plastering.....	28
Stone-cutting.....	15
Blacksmithing.....	13
Wood-carving.....	12
Total.....	469

These pupils were instructed by 17 teachers for six months. Since the organization of the schools 1,643 have followed the courses.

The buildings are of brick and cover a plat of land 200 feet on First avenue and 112 feet on Sixty-seventh and Sixty-eighth streets. The tuition charge varies from \$12 to \$35 for the course. The apparatus is valued at \$1,000, and the property at \$120,000.

The receipts during the year from tuition fees were \$6,866; the expenditures for building, \$8,740; for salaries, \$2,657; for implements, \$1,310; for material, \$2,247, the deficit being met by the founder and proprietor, Mr. Auchmuty. Comparing the per capita cost of material used at this school, \$4.80, and that of the Baltimore school, \$2.50, of the Miller Manual Labor school, \$6.22, it would seem to be a mean between them.

NAUTICAL SCHOOL OF NEW YORK CITY.

The school system of New York City has had for some years a rather unique branch, the nautical school on board the ship *St. Mary's*. By an act of 1874 Congress authorized the use of certain naval vessels for school purposes and the detail of officers as instructors, providing that "no person shall be sentenced to or received at such schools as a punishment or commutation of punishment for crime." The *St. Mary's* is under the charge of the board of education and the council of the Chamber of Commerce. During the winter months instruction in common school studies and seamanship are carried on, and during the summer a cruise across the ocean is made for practice.

The graduating exercises of the school were held on October 13, at New York City, under the care of the council of the Chamber of Commerce. The boys were examined in practical seamanship and navigation by several sea captains, twenty-six receiving certificates. The report on the examination shows that the graduates were proficient in seamanship and sailmaking, and, with one or two exceptions, good navigators. Three-fourths have since embarked on merchant vessels. The ship can accommodate 120 pupils. During the year 112 were enrolled. The per capita cost is higher than in the other branches of the school system.

CHAPTER XVI.

COMMERCIAL AND BUSINESS COLLEGES—NURSES' TRAINING SCHOOLS.

I.—COMMERCIAL AND BUSINESS COLLEGES.

GENERAL REMARKS.

Two hundred and twenty-two institutions appear on our lists for the year under review, an increase of five over last year. Twenty-one report for the first time, and sixteen formerly reporting have either ceased to exist, or failing for several successive years to reply to inquiries addressed to them from this Office are presumed to be no longer in operation.

The following are the changes for the year in the names of institutions:

Location.	Name.	Changed to—
Bridgeport, Conn.....	Gaffey's Short-hand School.....	Martin's Short-hand School.
Hartford, Conn.....	Gaffey's Short-hand School.....	Porter's Select School of Short-hand and Type-writing.
Sioux Falls, Dak....	Silsber's Business College.....	Sioux Falls Business College.
Davenport, Iowa....	Iowa Commercial Institute.....	Iowa Commercial College.
Ottumwa, Iowa.....	Ottumwa Business College.....	Ottumwa Business College and Normal Institute.
Madisonville, Ky....	National Institute of Mathematics ...	National Institute.
Elmira, N. Y.....	Elmira School of Commerce and Allen Business College.	Elmira School of Commerce.
Pittsburg, Pa.....	Curry Institute and Union Business College.	Curry University.
Waco, Tex.....	Waco Business College.....	Hill's Business College.
Milwaukee, Wis.....	Excelsior Business College.....	Wilmot Business and Short-hand College.

A new school has recently been organized at Freeport, Ill., and, with the Rockford Business College at Rockford, forms Rockford Business University. The Nelson Ladies' Business College at Cincinnati has been consolidated with the Nelson Business College.

There is a marked tendency among the better class of these institutions to improve the courses of instruction, making them more thorough and practical. By genuine business transactions the student becomes practically familiar with commercial operations of all kinds. "He buys and sells merchandise, real estate, etc.; receives and forwards goods to be sold on commission; gets insured; deposits in bank; gives and receives checks, receipts, orders, notes, drafts," etc. Curry University, formerly known as Curry Institute and Union Business College, has in addition a collegiate course of four years, Latin, Greek, and mathematics being taught throughout. The St. Stanislaus Commercial College, at Bay St. Louis, Miss., requires candidates for graduation to pass a satisfactory examination in mathematics through trigonometry, in book-keeping, and in commercial law. There is a post-graduate course in the "higher mathematics," comprising conic sections, calculus, navigation, etc. French, German, and Spanish are also taught in this institution.

To supply the increasing demand for stenographers, schools of short-hand and type-writing have been established in various parts of the country, and, with few exceptions, all business colleges now have a "department of short-hand." A number of systems are taught, but that of Ben Pitman is more generally used than any other in this country, and may be called the "American system." According to reports of principals the length of time required to fit the average student for the satisfactory discharge of the duties of stenographer is from six to eight months, but many institutions profess to accomplish that result in a much shorter period.

The number of students reported in business courses of city, normal, and secondary schools, and of colleges, is 19,683, an increase of 4,099 over last year.

TABLE 85.—*Summary of Statistics of Commercial and Business Colleges for 1887-88.*

States.	Number of Institutions.	Instructors.			Students.					Number of Students in Business Courses of City, Normal, and Secondary Schools, and of Colleges.	Volumes in Library.	
		Male.	Female.	Total.	Male.	Female.	Total.	Day School.	Evening School.			
North Atlantic Division:												
Maine	3	18	3	21	573	156	729	609	120	343	550	
New Hampshire.....	3	7	2	9	{ 125 (214) 26 }		365	251	114	135	4,000	
Vermont.....	3	7	5	12	{ 177 (341) 48 }		225	198	27	178	1,330	
Massachusetts.....	16	56	22	78	{ 2,001 (341) 854 }		3,196	{ 2,257 (341) 598 }		855	900	
Rhode Island	2	10	2	12	388	121	509	395	114	95	380	
Connecticut.....	6	7	4	11	317	205	522	344	178	247	.....
New York.....	21	129	38	167	6,363	1,457	7,825	{ 5,331 (825) 1,669 }		1,809	7,480	
New Jersey	6	39	6	45	1,629	256	1,885	1,208	677	827	2,600	
Pennsylvania.....	17	92	20	112	4,201	1,495	5,696	4,262	1,434	1,403	3,349	
Total.....	77	365	102	467	{ 15,779 (555) 4,618 }		20,952	{ 14,855 (1,166) 4,931 }		5,892	20,589	
South Atlantic Division:												
Delaware.....	2	11	1	12	221	64	285	126	159	15	.....
Maryland.....	1	9		9	485	65	550	400	150	147	.....
District of Columbia.....	3	16	6	22	524	221	745	471	274	232	6,200	
Virginia.....	2	4		4	83	8	91	58	33	456	623	
West Virginia.....	1	5	2	7	239	29	268	155	113	130	0	
North Carolina.....										447	.....
South Carolina.....										84	.....
Georgia.....	3	11		11	539	15	554	{ 316 (187) 51 }		543	2,500	
Florida.....										153	.....
Total.....	12	56	9	65	2,091	402	2,493	{ 1,526 (187) 780 }		2,207	9,323	
South Central Division:												
Kentucky.....	4	26	4	30	1,376	238	1,614	{ 793 (700) 121 }		528	1,110	
Tennessee.....	8	26	4	30	{ 976 (220) 140 }		1,336	{ 751 (520) 65 }		272	470	
Alabama.....										533	.....
Mississippi.....	2	11	1	12	225	25	250	250		155	2,500	
Louisiana.....	4	17	2	19	364	40	404	353	51	178	2,180	
Texas.....	2	12	2	14	674	116	790	628	162	187	100	
Arkansas.....	1	4		4	350	50	400	325	75	91	320	
Total.....	21	96	13	109	{ 3,965 (220) 609 }		4,794	{ 3,100 (1,220) 474 }		1,944	6,630	
North Central Division:												
Ohio.....	18	68	18	86	{ 2,064 (916) 678 }		3,658	{ 2,364 (916) 378 }		975	300	
Indiana.....	10	38	16	54	{ 1,863 (200) 741 }		2,804	{ 1,332 (1,095) 377 }		444	2,036	
Illinois.....	11	57	14	71	4,266	1,063	5,329	4,500	829	1,181	14,700	
Michigan.....	10	31	7	38	{ 1,247 (68) 610 }		1,925	{ 1,018 (803) 104 }		370	9,758	
Wisconsin.....	7	25	9	34	1,074	277	1,351	1,095	256	728	3,176	
Minnesota.....	3	10	2	12	635	124	759	651	108	245	700	
Iowa.....	16	62	22	84	{ 2,513 (300) 893 }		3,706	3,145	561	1,356	1,583	
Missouri.....	13	64	13	77	2,692	1,054	3,746	{ 2,890 (150) 706 }		935	6,050	
Dakota.....	1	3		3	71	23	94	79	15	228	.....
Nebraska.....	3	13	2	15	1,011	256	1,267	1,169	98	409	25	
Kansas.....	7	33	10	43	1,713	622	2,335	1,967	368	986	.....
Total.....	99	404	113	517	{ 19,149 (1,484) 6,341 }		26,974	{ 20,210 (2,964) 3,800 }		7,857	38,333	

TABLE 85.—Summary of Statistics of Commercial and Business Colleges for 1887-88—Continued.

States.	Instructors.			Students.					Number of Students in Business Courses of City, Normal, and Secondary Schools, and of Colleges.	Volumes in Library.
	Number of Institutions.	Male.	Female.	Total.	Male.	Female.	Total.	Day School.	Evening School.	
Western Division:										
Montana.....	2	5	2	7	98	29	127	76	51	119
Colorado.....										65
New Mexico.....										79
Indian Territory.....										11
Utah.....										16
Nevada.....										91
Washington.....	1	3		3	63	7	70	47	23	71
Oregon.....	1	5	2	7	200	160	360	360		119
California.....	9	23	16	44	{ 1,369 ⁽⁴⁶⁾	490	1,905	1,746	150	1,277
Total.....	13	41	20	61	{ 1,730 ⁽⁴⁶⁾	686	2,462	2,229	233	1,783
SUMMARY.										
North Atlantic Division....	77	365	102	467	{ 15,779 ⁽⁵⁵⁵⁾	4,618	20,952	{ 14,855 ⁽¹⁸⁷⁾	4,931	5,892
South Atlantic Division....	12	56	9	65	{ 2,091 ⁽²²⁰⁾	402	2,493	{ 1,526 ⁽¹⁸⁷⁾	780	2,207
South Central Division.....	21	96	13	109	{ 3,965 ^(1,484)	609	4,794	{ 3,100 ^(1,220)	474	1,944
North Central Division.....	99	404	113	517	{ 19,149 ⁽⁴⁶⁾	6,341	26,974	{ 20,210 ^(2,964)	3,800	7,857
Western Division.....	13	41	20	61	{ 1,730 ⁽⁴⁶⁾	686	2,462	{ 2,229	233	1,783
Total for 1887-88.....	222	962	257	1,219	{ 42,714 ^(2,305)	12,653	57,675	{ 41,920 ^(5,537)	10,218	19,683
Total for 1886-87.....	217	911	220	1,131	{ 36,676 ^(6,297)	10,215	53,188	{ 35,792 ^(5,872)	11,524	15,584
Increase.....	5	51	37	88			4,487			4,099

TABLE 86.—Statistics of Commercial

	Post-office Address.	Name.	Year of First Opening.	Principal.
	1	2	3	4
1	Little Rock, Ark.....	Little Rock Commercial College.....	1874	M. A. Stone.....
2	Auburn, Cal.....	Sierra Normal College and Business Institute.	1883	M. W. Ward.....
3	Los Angeles, Cal.....	Woodbury's Business College.....	1884	F. C. Woodbury.....
4	Oakland, Cal.....	Oakland Business College and Normal School.*	1876	D. C. Taylor.....
5	Sacramento, Cal.....	Sacramento Business College.....	1873	E. C. Atkinson.....
6	San Francisco, Cal. (46 O'Farrell St.).	Barnard's Business College*.....	1875	G. B. Barnard.....
7	San Francisco, Cal.....	Commercial School.....	1884	Isidor Leszynsky.....
8	San Francisco, Cal. (640 Clay St.).	Globe Business College*.....	1882	H. C. Roeth.....
9	San Francisco, Cal.....	Heald's Business College*.....	1863	E. P. Heald.....
10	San Francisco, Cal. (320 Post St.).	Pacific Business College*.....	1863	T. A. Robinson.....
11	Denver, Colo.....	Denver Business College.....	1882	John G. Pilsen.....
12	Pueblo, Colo.....	Pueblo Business College.....	1878	H. C. Warden.....
13	Bridgeport, Conn.....	Gaffey's Short-hand School*.....	1887	Miss Helen L. Mattoon.....
14	Bridgeport, Conn.....	Martin's Short-hand School.....	1887	W. J. Martin.....
15	Hartford, Conn.....	Gaffey's Short-hand School*.....	1887	Mrs. M. A. Merrill.....
16	Hartford, Conn.....	Hannum's Hartford Business College	1877	T. W. Hannum, F. A. Stedman.
17	Hartford, Conn.....	Porter's Select School of Short-hand and Type-writing.	1887	Mabel W. Porter.....
18	New Haven, Conn. (49 Church St.).	Gaffey's Short-hand School.....	1884	John F. Gaffey.....
19	Sioux Falls, Dak.....	Sioux Falls Business College.....	1887	J. L. Wallace.....
20	Wilmington, Del.....	Crabb's Business College and Writing Parlors.*	1884	James H. Crabb.....
21	Wilmington, Del.....	Wilmington Commercial College*.....	1886	H. S. Goldey.....
22	Washington, D. C.....	Business Department, Washington High School.	1877	F. R. Lane.....
23	Washington, D. C. (313 Sixth St.).	Martyn's Commercial College.....	1886	Francis G. Martyn.....
24	Washington, D. C.....	Spencerian Business College.....	1864	Henry C. Spencer.....
25	Atlanta, Ga.....	Moore's Business University.....	1868	Benj. F. Moore.....
26	Augusta, Ga.....	Osborne's Business College.....	1882	S. L. Osborne.....
27	Augusta, Ga.....	St. Patrick's Commercial Institute.....	1875	Brother Francis.....
28	Chicago, Ill. (85 E. Madison St.).	Kimball's Short-hand and Type-writing Training School.	1884	D. Kimball.....
29	Chicago, Ill. (149 and 153 State St.).	Metropolitan Business College.....	1873	O. M. Powers.....
30	Chicago, Ill. (278 W. Madison St.).	Souder's Chicago Business College*..	1872	J. J. Souder.....
31	Dixon, Ill.....	Dixon Business College.....	1881	J. B. Dille.....
32	Galesburg, Ill.....	Western Business College*.....	1866	M. H. Barringer.....
33	Jacksonville, Ill.....	Jacksonville Business College and English Training School.*	1866	G. W. Brown.....
34	Joliet, Ill.....	Joliet Business College and English Training School.	1866	H. Russell.....
35	Peoria, Ill.....	Parish's Business College and Telegraphic Institute.*	1865	A. S. Parish.....
36	Quincy, Ill.....	Gem City Business College.....	1870	D. L. Musselman.....
37	Rockford, Ill.....	Rockford Business College.....	1865	G. A. Winans.....
38	Springfield, Ill.....	Springfield Business College.....	1864	Bogardus & Chicken
39	Danville, Ind.....	Central Normal College.....	1876	Mrs. F. P. Adams.....
40	Evansville, Ind.....	Evansville Commercial College.....	1850	S. N. Curnick.....

* Statistics of 1886-87.

and Business Colleges for 1887-88.

No. of Months in Full Course of Study.		Weeks in Scholastic Year.		Tuition.		Instruct-ors.		Students.				Volumes in Library.	Physical Training.	
Day Course.	Evening Course.	Day Course.	Evening Course.	Day Course.	Evening Course.	Male.	Female.	Male.	Female.	Day Course.	Evening Course.			
5	6	7	8	9	10	11	12	13	14	15	16	17	18	
6	10	52	43	.....	.....	4	.....	350	50	325	75	320	None.....	1
10	.....	40	.....	\$60	.....	3	3	90	42	132	.....	800	.....	2
12	.....	52	.....	125	.....	4	3	225	80	305	.....	.....	.....	3
6	12	.....	.....	.....	.....	2	2	(46)	.....	40	6	.....	.....	4
.....	.....	52	52	75	\$75	5	3	276	51	259	68	750	None.....	5
6	12	.....	.....	115	70	4	1	95	15	65	45	150	.....	6
10	.....	.....	.....	(a)	.....	5	2	183	137	320	.....	10	None.....	7
6	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
6-12	.....	52	.....	125	.....	.....	.....	350	150	500	0	100	.....	9
6	12	.....	.....	125	75	5	2	150	15	125	40	.....	.....	10
8	12	52	39	110	15	2	1	66	18	55	29	65	None.....	11
.....	.....	.....	.....	60	40	3	1	32	11	21	22	.....	None.....	12
6	12	52	52	60	60	1	1	15	5	5	15	.....	.....	13
4-7	8-12	52	52	110	15	1	1	50	35	38	47	.....	.....	14
6	12	52	52	60	60	1	1	12	6	10	8	.....	.....	15
.....	.....	45	25	.....	.....	5	.....	166	35	159	42	.....	None.....	16
6	12	52	52	120	60	.....	1	14	34	32	16	.....	.....	17
6	12	.....	.....	72	60	1	0	60	90	100	50	.....	None.....	18
.....	.....	52	16	.....	25	3	.....	71	23	79	15	.....	.....	19
.....	3	47	47	60	40	4	0	103	47	75	75	.....	.....	20
8	.....	43	26	80	20	7	1	118	17	51	84	.....	.....	21
10	0	36	0	0	0	8	2	41	49	90	0	6,000	Military drill and gymnasium.	22
6	12	40	40	50	40	4	0	200	30	170	60	0	None.....	23
10	10	40	40	70	60	4	4	283	142	211	214	200	Delsarte method.	24
4	6	50	24	75	30	3	0	165	5	145	25	0	None.....	25
4	6	50	50	50	35	3	0	187	10	171	26	.....	None.....	26
.....	.....	17.50	.....	.....	.....	5	.....	187	.....	(187)	.....	2,500	.....	27
4	6	52	52	.....	.....	2	0	25	59	62	22	.....	.....	28
12	7	52	30	100	20	10	2	1,701	200	1,648	253	100	None.....	29
12	14	52	29	90	28	7	.....	512	258	586	184	.....	.....	30
9	.....	50	.....	40	.....	6	2	229	89	318	.....	2,100	.....	31
6-10	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	32
9	6	42	24	80	20	5	2	239	62	255	46	.....	.....	33
24	30	50	40	40	30	3	2	450	125	500	75	12,000	Dr. Lewis's course and military drill.	34
6-10	.....	51	17	60	15	1	2	109	35	114	30	.....	.....	35
6	.....	52	10	60	10	10	1	627	43	640	30	100	None.....	36
6	6	50	26	50	10-25	6	1	236	104	245	95	400	Gymnasium.	37
6	.....	40	.....	50	.....	7	2	133	88	132	94	.....	Gymnasium.	38
.....	.....	.....	.....	32	.....	9	4	623	272	(895)	.....	1,496	.....	39
6	12	.....	.....	45	35	2	2	135	40	140	35	.....	None.....	40

a \$40 to non-residents.

b Per month.

TABLE 86.—Statistics of Commercial

	Post-office Address.	Name.	Year of First Opening.	Principal.
	1	2	3	4
41	Fort Wayne, Ind.....	McDermut & Whiteleather's Business College.	1885	McDermut & Whiteleather.
42	Hope, Ind.....	Hope Commercial College*.....	1885	James H. Clark.....
43	Indianapolis, Ind. (N. Penn. St.).	Indianapolis Business University.....	1850	Redman, Heel & Osborn.
44	Lafayette, Ind. (124 Columbia St.).	Union Business College.....	1880	C. M. Robinson.....
45	Logansport, Ind.....	Hall's Business College.....	1867	E. A. Hall.....
46	Millersburg, Ind.....	C. M. Immel's institute.....	1883	C. M. Immel.....
47	Richmond, Ind.....	Richmond Business College and Institute of Penmanship and Short-hand.	1860	O. E. Fulghum.....
48	Terre Haute, Ind. (cor. of Main and 6th Sts.).	Terre Haute Commercial College.....	1859	W. C. Isbell.....
49	Cedar Rapids, Iowa.....	Cedar Rapids Business College.....	1880	S. H. Goodyear, pres.....
50	Clinton, Iowa.....	Clinton Business College*.....	1886	O. P. Judd.....
51	Davenport, Iowa.....	Davenport Business College.....	1864	J. C. Duncan.....
52	Davenport, Iowa.....	Iowa Commercial College.....	1884	Wood & Van Patten.....
53	Decorah, Iowa.....	Decorah Business College.....	1874	John R. Slack.....
54	Des Moines, Iowa.....	Capital City Commercial College.....	1884	J. M. Mehan.....
55	Des Moines, Iowa.....	Iowa Business College.....	1885	Jennings & Chapman.....
56	Dubuque, Iowa.....	Bayless Business College.....	1853	C. Bayless.....
57	Dubuque, Iowa.....	Mathematical School.....	1884	Jno. H. Metcalf.....
58	Iowa City, Iowa.....	Iowa City Commercial College.....	1865	J. H. Williams.....
59	Keokuk, Iowa.....	Peirce's Business College.....	1857	C. H. Peirce.....
60	Marshalltown, Iowa.....	Marshalltown Business College.....	1887	C. G. Whitcomb.....
61	Muscatine, Iowa.....	Muscatine Commercial College.....	1836	J. B. Harris.....
62	Oskaloosa, Iowa.....	Oskaloosa Business College.....	1866	W. L. Howe.....
63	Ottumwa, Iowa.....	Ottumwa Business College.....	1884	H. M. Gardner.....
64	Sioux City, Iowa.....	North-Western Business College.....	1884	O. S. Davidson.....
65	Atchison, Kans.....	Atchison Business College.....	1885	Conrod & Smith.....
66	Emporia, Kans.....	Emporia Business College.....	1881	O. W. Miller, pres.....
67	Lawrence, Kans.....	Lawrence Business College.....	1887	E. L. McIlrath.....
68	Leavenworth, Kans.....	Central Business College.....	1887	Leach & Parker.....
69	Topeka, Kans.....	Pond's Business College.....	1867	M. A. Pond.....
70	Topeka, Kans.....	Topeka Business College and Short-hand Institute.	1884	Roudebush Bros.....
71	Wichita, Kans.....	South-Western Business College.....	1885	E. H. Fritch.....
72	Lexington, Ky.....	Commercial College of Kentucky University.*	.....	Wilbur R. Smith.....
73	Louisville, Ky. (406 3d St.).	Bryant & Stratton Business College..	1864	Ferrier, Wright & Spencer.
74	Louisville, Ky. (Green St.).	Southern Business College.....	1878	Ben. C. Weaver.....
75	Madisonville, Ky.....	National Institute.....	1886	E. McCulley.....
76	New Orleans, La. (401 Bayou Road).	Babad's Academy.....	1862	Chas. H. Babad.....
77	New Orleans, La.....	Euston's Business College.....	1886	B. B. Euston.....
78	New Orleans, La. (131 Carondelet St.).	J. W. Blackman's Commercial College.	1862	J. W. Blackman.....
79	New Orleans, La. (cor. St. Charles and Lafayette Sts.).	Soulé Commercial College and Literary Institute.	1856	Geo. Soulé.....
80	Augusta, Me. (Water St.).	Dirigo Business College.....	1863	R. B. Capen.....
81	Portland, Me.....	Portland Business College.....	1863	Levi A. Gray.....
82	Rockland, Me.....	Rockland Commercial College.....	1879	H. A. Howard.....
83	Baltimore, Md.....	Eaton & Burnett's Business College..	1888	Eaton & Burnett.....
84	Boston, Mass. (608 Washington St.).	Bryant & Stratton Commercial School.	1860	H. E. Hibbard.....
85	Boston, Mass. (666 Washington St.).	Comer's Commercial College.....	1840	Charles E. Comer.....
86	Boston, Mass. (167 Tremont St.).	French's Business College.....	1843	Chas. French.....

* Statistics of 1886-87.

and Business Colleges for 1887-88—Continued.

No. of Months in Full Course of Study.		Weeks in Scho- lastic Year.		Tuition.		In- struct- ors.		Students.				Volumes in Library.	Physical Training.	
Day Course.	Evening Course.	Day Course.	Evening Course.	Day Course.	Evening Course.	Male.	Female.	Male.	Female.	Day Course.	Evening Course.			
5	6	7	8	9	10	11	12	13	14	15	16	17	18	
8	.....	50	39	\$50	\$27	3	1	150	35	123	62	.....	None.....	41
6	.....	46	.....	37	.....	4	.....	40	.....	40	.....	150	.....	42
6	.....	50	26	75	25	4	2	290	150	375	65	250	.....	43
9	18	40	24	45	18	3	1	(200)	(200)	.....	40	.....	.....	44
6	12	40	24	45	20	3	1	140	62	162	40	100	.....	45
5	8	20	20	25	20	2	.....	51	22	33	40	0	None.....	46
5	8	50	32	.....	48	5	3	158	55	178	35	.....	.....	47
.....	.....	.....	.....	.....	.....	3	2	276	105	281	100	.....	.....	48
6-12	.....	52	26	80	.....	7	1	221	95	271	45	0	None.....	49
.....	.....	52	22	60	36	5	2	174	39	114	99	.....	.....	50
.....	.....	52	.....	45	.....	6	2	467	77	544	.....	95	Gymnasium..	51
68	12	52	26	50	.....	5	1	324	163	442	45	50	.....	52
6	0	52	0	48	0	1	1	68	5	73	0	.....	None.....	53
9	.....	48	30	60	20	4	5	306	194	365	135	280	Gymnastics..	54
9	.....	52	26	75	20	5	2	(300)	258	42	200	200	Gymnasium..	55
6	12	52	24	75	25	4	1	250	75	265	60	400	.....	56
.....	.....	.....	.....	70	36	1	.....	22	5	27	.....	87	.....	57
.....	.....	52	24	50	5-15	4	1	142	33	175	.....	.....	.....	58
6	18	52	26	40	16	4	0	157	39	136	60	.....	None.....	59
6	8	52	36	55	40	3	1	65	40	80	25	75	.....	60
.....	.....	52	.....	25-40	.....	2	2	37	19	56	.....	29	.....	61
7	6	50	24	75	30	4	1	166	59	225	.....	72	None.....	62
6	12	48	48	75	40	4	1	30	4	18	16	150	.....	63
6	10	52	36	80	25	3	1	84	46	96	34	150	None.....	64
6	6	40	24	55	25	3	1	93	55	98	50	.....	.....	65
5	6	50	24	40	15	5	3	210	180	370	20	.....	.....	66
.....	.....	50	.....	50	.....	9	2	380	105	465	.....	.....	None.....	67
6	9	50	36	60	27	3	.....	89	16	60	45	.....	None.....	68
6	12	50	24	50	30	2	1	250	115	300	65	.....	.....	69
7½	12-18	50	25	75	30-54	2	2	166	81	164	83	0	None.....	70
7	6	50	26	66½	25	9	1	545	70	510	105	.....	.....	71
3	6	.....	.....	.....	.....	10	1	650	50	(700)	.....	.....	.....	72
.....	.....	50	26	100	25	8	1	490	121	490	121	110	Gymnasium..	73
3-5	6-8	51	51	70	70	4	0	129	5	134	.....	0	None.....	74
4	0	52	0	39	.....	4	2	107	62	169	0	1,000	None.....	75
11	.....	45	.....	60	.....	1	1	15	0	15	0	.....	.....	76
9	12	52	52	(b) (c)	.....	1	0	21	3	17	7	0	None.....	77
6	12	52	52	(5-10 per mo.)	.....	4	.....	35	5	40	.....	200	.....	78
6-18	12-24	52	52	75-150	60-120	11	1	293	32	281	44	1,980	Gymnasium..	79
5	.....	40	.....	35	.....	9	1	211	60	271	0	200	None.....	80
4-6	.....	48	40	60	.....	6	.....	233	40	215	53	200	.....	81
3-12	.....	42	26	60	.....	3	2	129	56	123	62	150	Gymnasium..	82
6-18	.....	51	25	100	25	9	.....	485	65	400	150	.....	.....	83
10	0	40	0	160	0	21	0	600	135	785	0	.....	None.....	84
9	12	40	26	120	25	7	3	325	125	300	150	100	None.....	85
6-10	.....	10	.....	140	.....	2	1	73	21	94	.....	300	.....	86

a Average.

b \$5 per month.

c \$4 per month.

TABLE 86.—Statistics of Commercial

	Post-office Address.	Name.	Year of First Opening.	Principal.
	1	2	3	4
87	Boston, Mass.....	Hickox's Short-hand School.....	1880	W. E. Hickox.....
88	Boston, Mass.....	Reckers & Bradford's Commercial School.....	1876	Reckers & Bradford....
89	Boston, Mass. (161 Tremont St.).....	Sawyer's Commercial College.....	1838	Geo. A. Sawyer.....
90	Fall River, Mass.....	Holmes' Bryant & Stratton Commercial College.....	1857	F. A. Holmes.....
91	Holyoke, Mass.....	Childs' Business College.....	1883	C. H. and E. E. Childs...
92	Lawrence, Mass.....	Cannon's Commercial College.....	1881	Gordon C. Cannon.....
93	Lowell, Mass.....	Lowell Commercial College.....	1859	Albert C. Blaisdell.....
94	Pittsfield, Mass.....	Chickering's Commercial College.....	1861	Benj. Chickering.....
95	Springfield, Mass. (22 School St.).....	Childs' Business College.....	1884	C. H. and E. E. Childs...
96	Springfield, Mass.....	New England Short-hand School.....	1837	I. E. House.....
97	Worcester, Mass.....	Foster's Business College.....	1862	Prof. C. C. Foster.....
98	Worcester, Mass.....	Hinman's Business College.....	1881	A. H. Hinman.....
99	Worcester, Mass.....	Worcester Select School of Short-hand and Type-writing.....	1887	Geo. C. Creelman.....
100	Battle Creek, Mich.....	Commercial Department of Battle Creek High School. *	1881	M. W. Cobb.....
101	Battle Creek, Mich.....	Krug's Business College.....	1882	J. B. Krug.....
102	Bay City, Mich.....	Devlin's Bay City Business College.....	1880	Cyrus H. Devlin.....
103	Big Rapids, Mich.....	Industrial School of Business.....	1884	W. N. Ferris.....
104	Detroit, Mich.....	Commercial Department of Detroit High School.....	1884	F. L. Bliss.....
105	Detroit, Mich.....	Detroit Business University.....	1850	W. F. Jewell.....
106	East Saginaw, Mich.....	Parsons' Business College.....	1868	A. C. Parsons.....
107	Grand Rapids, Mich.....	Grand Rapids Business College and Practical Training School.....	1866	A. S. Parish.....
108	Ionia, Mich.....	Poucher Business College.....	1877	Irvin M. Poucher.....
109	Kalamazoo, Mich.....	Parsons' Business College, Short-hand, and Telegraphic Institute.....	1869	W. P. Teller.....
110	Duluth, Minn.....	Parsons' Business College.....	1886	W. F. Parsons.....
111	Minneapolis, Minn.....	Archibald Business College.....	1877	A. R. Archibald.....
112	Winona, Minn.....	Winona Business College.....	1878	R. A. Lambert.....
113	Bay St. Louis, Miss.....	St. Stanislaus Commercial College.....	1855	Bro. Osmond.....
114	Jackson, Miss.....	Capital Commercial College.....	1884	L. A. Wyatt.....
115	Hannibal, Mo.....	Bluff City Business College.....	1884	Ferdinand Henderson..
116	Humphreys, Mo.....	Business Institute.....	1884	G. A. Smith.....
117	Kansas City, Mo.....	National Business College.....	1884	Henry Coon.....
118	Kirksville, Mo.....	Kirksville Mercantile College and Writing Institute.....	1880	Geo. J. McDaniel.....
119	St. Joseph, Mo.....	Chapman's Business College*.....	1880	Thomas C. Chapman...
120	St. Joseph, Mo.....	Ritner's Commercial College*.....	1879	P. Ritner.....
121	St. Joseph, Mo.....	St. Joseph Commercial College.....	1868	Bro. Marcellian.....
122	St. Louis, Mo.....	Johnson's Commercial College.....	1876	F. H. Madden.....
123	St. Louis, Mo.....	Jones' Commercial College.....	1841	J. G. Bohmer.....
124	St. Louis, Mo.....	Mound City Commercial College.....	1859	.....
125	St. Louis, Mo.....	St. Louis Mercantile College.....	1882	H. C. Perkins and P. J. Herpel.....
126	Sedalia, Mo.....	Central Business College*.....	1883	C. W. Robbins.....
127	Stanberry, Mo.....	North-Western Normal School and Business Institute.....	1881	Allen Moore, B. S.....
128	Hastings, Nebr.....	Hastings Commercial College.....	1884	H. B. Gilbert.....
129	Lincoln, Nebr.....	Lincoln Business College.....	1884	Lillebridge & Rose.....
130	Omaha, Nebr. (1114 and 1116 Farnam St.).....	Omaha Commercial College.....	1874	M. G. Rohrbough.....
131	Manchester, N. H.....	Bryant and Stratton Business College.*.....	1865	William Heron, Jr.....
132	New Hampton, N. H.....	New Hampton Commercial College.....	1877	Frank W. Preston.....
133	Portsmouth, N. H.....	Smith's Academy and Commercial College.....	1873	Lewis E. Smith.....

* Statistics of 1886-87.

and Business Colleges for 1887-88—Continued.

No. of Months in Full Course of Study.		Weeks in Scho- lastic Year.		Tuition.		In- struct- ors.		Students.				Volumes in Library.	Physical Training.	
Day Course.	Evening Course.	Day Course.	Evening Course.	Day Course.	Evening Course.	Male.	Female.	Male.	Female.	Day Course.	Evening Course.			
5	6	7	8	9	10	11	12	13	14	15	16	17	18	
3-5	.....	.....	.....	\$50	.....	1	1	50	77	85	42	.....	None	87
6-24	24-36	44	26	140	\$25	2	1	93	32	92	33	200	Gymnasium	88
.....	.....	44	0	120	0	2	3	68	33	101	0	100	Gymnasium	89
9	20	48	36	75	50	2	1	263	125	248	140	.....	.....	90
8	10	42	40	90	50	2	2	73	34	43	64	.....	.....	91
4	12	40	40	120	30	2	2	76	38	39	75	150	None	92
6	12	48	40	40	11	2	3	(341)	(341)	(341)	(341)	.....	None	93
3	.....	42	.....	40	.....	1	1	34	8	42	.....	.....	.....	94
8	16	43	30	90	30	3	1	105	75	134	46	10	None	95
6	12	52	52	50	50	1	0	16	24	21	19	0	None	96
10	6	40	30	20	15	1	1	32	15	37	10	.....	None	97
9	18	43	26	90	30	5	2	170	40	210	.....	.....	Gymnastics	98
6	12	50	50	.....	.....	2	.....	18	22	26	14	40	None	99
20	.....	40	.....	α10	.....	1	.....	13	8	21	.....	68,200	.....	100
12	18	50	25	40	20	3	0	63	12	60	15	0	None	101
7	12	48	24	50	50	2	3	117	33	150	.....	.....	.....	102
6	5	43	20	45	15	3	2	210	175	350	35	109	.....	103
40	.....	40	.....	24	.....	1	0	(68)	.....	68	0	1,453	None	104
.....	.....	52	26	60-75	30	13	.....	500	303	(803)	.....	.....	None	105
12	18	40	40	40	40	2	1	99	19	78	40	.....	.....	106
.....	.....	.....	.....	.....	.....	3	0	138	29	167	.....	.....	.....	107
6	.....	40	.....	.....	.....	1	.....	27	7	34	.....	0	None	108
9	6	36	24	.....	.....	2	1	80	24	90	14	.....	.....	109
12	9	52	36	100	75	1	1	100	34	100	34	.....	.....	110
48	.....	48	24	90	24	7	0	365	66	381	50	300	None	111
8	12	.....	.....	65	20	2	1	170	24	170	24	400	None	112
50	.....	40	.....	100	.....	9	0	75	0	75	.....	2,500	Gymnastics	113
3	.....	52	.....	.....	.....	2	1	130	25	175	.....	.....	.....	114
8	16	50	35	.....	.....	2	1	100	50	150	.....	0	.....	115
6	.....	40	.....	20	.....	5	1	8	4	12	.....	.....	Calisthenics	116
6	16	52	33	60	30	5	.....	275	73	200	148	.....	None	117
28	.....	50	.....	.....	.....	4	1	152	89	241	100	.....	Military drill	118
4	6	52	26	60	25	3	2	216	74	150	140	.....	.....	119
6	12	51	26	40	23	4	1	118	28	94	52	.....	.....	120
.....	.....	40	.....	50	.....	9	.....	150	.....	(150)	.....	3,000	.....	121
6	12	50	32	100	65	5	1	162	31	101	92	.....	.....	122
6	18	52	28	100	27½	5	1	353	77	330	100	200	None	123
12	18	52	26	100	30	4	1	100	5	75	30	250	None	124
6	16	52	34	100	50	3	0	77	26	54	49	.....	None	125
12	.....	52	52	60	40	6	2	480	70	455	95	500	.....	126
.....	.....	46	.....	45	.....	9	2	501	527	1,028	0	2,000	None	127
6	12	52	30	.....	.....	2	1	70	45	67	48	25	None	128
6-12	.....	52	20	60	.....	5	1	401	101	302	.....	.....	None	129
8	24	52	28	65	30	6	.....	540	110	600	50	.....	.....	130
4	.....	52	32	65	16	2	.....	(214)	.....	100	114	.....	.....	131
.....	.....	40	.....	50	.....	2	1	78	13	91	.....	4,000	Gymnasium	132
.....	.....	40	.....	80	.....	3	1	47	13	60	.....	.....	.....	133

α For non-residents.

b Public School Library.

c Average.

TABLE 86.—*Statistics of Commercial*

	Post-office Address.	Name.	Year of First Opening.	Principal.
	1	2	3	4
134	Jersey City, N. J. (23 and 25 Newark Ave.).	Jersey City Business College.....	1884	W. E. Drake.....
135	Newark, N. J.....	Coleman National Business College*.....	1862	H. Coleman.....
136	Newark, N. J.....	New Jersey Business College.....	1874	C. T. Miller.....
137	Paterson, N. J.....	Paterson Business College*.....	1876	George W. Latimer.....
138	Trenton, N. J. (10 and 12 S. Greene St.).	The Stewart and Hammond Business College.....	1883	Thos. J. Stewart.....
139	Trenton, N. J.....	Trenton Business College*.....	1865	Andrew J. Rider.....
140	Albany, N. Y.....	Albany Business College.....	1857	John R. Carnell.....
141	Binghamton, N. Y.....	Lowell Business College.....	1850	J. E. Bloomer.....
142	Brooklyn, N. Y. (38 and 44 Court St.).	Claghorn's Bryant & Stratton Business College.....	1861	Chas. Claghorn.....
143	Brooklyn, N. Y. (16 Court St.).	French's Business College.....	1863	Geo. W. French.....
144	Brooklyn, N. Y.....	Kissick's Business College.....	1866	W. A. Kissick, M. A.....
145	Brooklyn, N. Y. (Jay St.).	St. James' Commercial College.....	1850	Brother Joseph.....
146	Brooklyn, E. D., N. Y.....	Wright's Business College.....	1873	Henry C. Wright.....
147	Buffalo, N. Y.....	Buffalo Business College*.....	1854	J. C. Bryant, M. D.....
148	Buffalo, N. Y.....	Buffalo Business University*.....	1886	A. S. Osborn.....
149	Elmira, N. Y.....	Elmira School of Commerce.....	1880	N. A. Miller.....
150	Geneva, N. Y.....	Geneva Business College.....	1880	A. E. Mackey.....
151	Glen Falls, N. Y.....	Glen Falls Business College*.....	1887	E. D. Sylvester.....
152	New York, N. Y. (62 Bowery, cor. Canal St.).	Paine's Business College.....	1849	Rutherford & Howell.....
153	New York, N. Y. (107 W. 84th St.).	The Paine Up-town Business College..	1872	H. W. Remington.....
154	Olean, N. Y.....	Westbrook Commercial College.....	1882	E. D. Westbrook.....
155	Peekskill, N. Y.....	Westchester County Institute.....	1877	Charles Unterreiner.....
156	Poughkeepsie, N. Y.....	Eastman National Business College..	1859	Clement C. Gaines.....
157	Rochester, N. Y. (cor. of State and Market Sts.).	Rochester Business University.....	1863	Williams & Rogers.....
158	Rochester, N. Y.....	Taylor & Son's Business College.....	1876	A. J. Taylor.....
159	Troy, N. Y.....	Troy Business College.....	1860	Thos. H. Shields.....
160	Utica, N. Y.....	Bryant and Stratton Utica Business College.....	1832	G. F. Hendrick.....
161	Akron, Ohio.....	Akron Business College.....	1866	O. S. Warner.....
162	Canton, Ohio.....	Canton Business College.....	1875	Wm. Feller.....
163	Cincinnati, Ohio (N.W. cor. 5th and Walnut Sts.).	Martin's Queen City Business College	1884	Thos. Martin.....
164	Cincinnati, Ohio (N.W. cor. 4th and Walnut Sts.).	Nelson's Business College.....	1856	Richard Nelson.....
165	Cleveland, Ohio.....	Spencerian Business College.....	1848	Spencer, Felton & Loomis.....
166	Cleveland, Ohio (205 Superior St.).	Standard Business College and School of Science.*	1882	H. Day Gould.....
167	Columbus, Ohio.....	Capital City Commercial College.....	1878	Humphries and Hageman.....
168	Columbus, Ohio.....	Columbus Business College and Normal School.....	1863	J. M. Brown.....
169	Dayton, Ohio.....	Miami Commercial College.....	1860	A. D. Wilt.....
170	Delaware, Ohio.....	National Pen Art Hall and Business College.....	1882	G. W. Michael.....
171	Findlay, Ohio.....	Findlay Business College*.....	1883	C. J. Oller and C. B. Browning.....
172	Hamilton, Ohio.....	Ohio Commercial College.....	1875	W. A. Nichols.....
173	Mansfield, Ohio.....	Ohio Business College.....	1866	J. W. Sharp.....
174	Oberlin, Ohio.....	Oberlin Business College.....		McKee and Henderson.....

* Statistics of 1886-87.

and Business Colleges for 1887-88—Continued.

No. of Months in Full Course of Study.		Weeks in Scho- lastic Year.		Tuition.		In- struct- ors.		Students.				Volumes in Library	Physical Training.	
Day Course.	Evening Course.	Day Course.	Evening Course.	Day Course.	Evening Course.	Male.	Female.	Male.	Female.	Day Course.	Evening Course.			
5	6	7	8	9	10	11	12	13	14	15	16	17	18	
10-18	56	44	28	\$75	\$25	5	2	160	18	78	100	100	None.....	131
4	6	52	30	75	25	10	1	406	34	358	82	1,000	.....	135
12	10	52	40	70	30	7	1	210	75	170	115	400	.....	136
10	15	42	32	75	50	.....	.....	136	18	83	71	.....	.....	137
10	.....	40	24	75	30	8	1	361	62	257	166	600	.....	138
10	12	42	24	75	30	9	1	356	49	262	143	500	.....	139
6	12	52	26	35-100	30	9	1	545	80	545	80	0	Gymnasium..	140
4	7	51	24	.....	.....	4	1	240	70	220	90	200	None.....	141
10-15	.....	40	.....	120	.....	7	1	192	30	222	0	.....	None.....	142
.....	.....	40	16	.....	.....	2	4	314	184	334	164	.....	.....	143
10-20	10-20	43	43	65	45	7	2	327	75	402	.....	.....	.....	144
10	.....	40	.....	40	.....	18	.....	825	.....	(825)	.....	3,000	Military drill and calis- thenics.	145
10	6	40	26	80-100	30	6	3	323	124	235	162	200	None.....	146
6	18	52	30	120	36	7	3	538	174	493	219	.....	.....	147
a7½	.....	52	43	50	40	8	2	323	113	317	119	.....	.....	148
4	12	52	24	.....	25	6	4	190	68	193	65	150	Gymnasium..	149
3-6	6-8	40	40	40	25	1	2	39	11	35	15	.....	Gymnasium..	150
5	8	40	20	80	30	2	1	24	16	28	12	0	.....	151
12	12	52	52	83	88	4	1	28	28	28	28	.....	.....	152
9	12	52	52	50-80	30-50	3	3	355	80	240	195	.....	.....	153
6	10	52	26	50	25	4	1	99	46	107	33	50	Gymnasium..	154
10	0	40	0	60	.....	2	1	34	18	52	0	500	Calisthenics..	155
3-6	6	52	26	100	20	15	1	871	80	885	66	3,000	Gymnasium..	156
.....	.....	40	24	100	30	10	2	390	66	393	63	.....	Military drill.	157
3-6	6-10	52	52	35	12	5	.....	168	107	135	160	.....	.....	158
6	9	52	26	75	40	6	2	350	55	275	130	180	.....	159
.....	.....	43	24	60-75	25-40	3	3	173	32	142	63	200	None.....	160
6	6	30	30	.....	.....	1	.....	20	4	13	11	0	Gymnastics..	161
5	12	52	32	100	60	3	0	107	18	73	52	.....	.....	162
8	12	52	52	50	50	3	2	90	50	70	70	100	None.....	163
.....	.....	12	.....	80	.....	9	4	228	92	320	0	.....	Gymnasium..	164
.....	.....	52	35	.....	.....	17	3	(916)	.....	(916)	.....	.....	None.....	165
9-12	12-18	52	52	60-75	40	1	.....	57	12	39	30	150	.....	166
.....	.....	52	24	45	35	2	3	120	50	170	.....	.....	None.....	167
12	.....	43	.....	50	.....	6	1	195	150	345	.....	.....	None.....	168
5	6	52	26	60	30	.....	.....	.....	.....	.....	.....	.....	None.....	169
3	.....	52	28	55	12	5	1	450	120	500	70	.....	.....	170
4	3	52	32	.....	.....	3	1	94	41	95	40	50	.....	171
6	12	50	32	90	50	3	0	95	21	61	55	.....	None.....	172
4-6	.....	50	.....	50	.....	2	1	104	36	140	.....	.....	.....	173
6	.....	50	.....	.....	.....	2	1	175	44	219	.....	.....	Gymnasium..	174

a Average.

TABLE 86.—Statistics of Commercial

	Post-office Address.	Name.	Year of First Opening.	Principal.
	1	2	3	4
175	Springfield, Ohio	Nelson Business College	1831	R. J. Nelson.....
176	Springfield, Ohio (339 W. Pleasant St.).	Van Sickle's Business College.....	1871	J. W. Van Sickle, LL.D.
177	Toledo, Ohio.....	Toledo Business College and Short- hand School.	1868	M. H. Davis.....
178	Youngstown, Ohio.....	Youngstown Normal Business Col- lege.	1835	J. C. Steiner.....
179	Portland, Oregon.....	Portland Business College.....	1866	A. P. Armstrong
180	Allentown, Pa.....	Allentown Business College.....	1869	W. L. Blackman.....
181	Altoona, Pa.....	International Business College.....	1835	Crowley & Reese.....
182	Altoona, Pa.....	Mountain City Business College.....	1835	G. G. Zeth.....
183	Easton, Pa.....	Easton Business College.....	1862	C. L. Free.....
184	Erie, Pa.....	Clark's Business College.....	1833	H. C. Clark.....
185	Harrisburg, Pa. (307 Market St.).	Pennsylvania Business College*.....	1873	J. N. Currey.....
186	Lancaster, Pa.....	Business College.....	1830	H. C. Weidler.....
187	Meadville, Pa.....	Bryant, Stratton, and Smith Business College.	1865	A. W. Smith.....
188	Philadelphia, Pa.....	Palms' Business College.....	1835	T. W. Palms
189	Philadelphia, Pa.....	Peirce College of Business.....	1865	Thos. M. Peirce.....
190	Pittsburg, Pa.....	Commercial Department of Pitts- burg Central High School.	1855	C. B. Wood.....
191	Pittsburg, Pa.....	Curry University.....	1830	James C. Williams.....
192	Pittsburg, Pa.....	Duff's Mercantile College.....	1840	P. Duff & Sons.....
193	Scranton, Pa.....	Wood's Business College.....	1836	F. E. Wood.....
194	Union City, Pa.....	Luce's Business College*.....	1876	Rev. N. R. Luce.....
195	Wilkes Barre, Pa.....	Wilkes Barre Business College.....	1836	W. J. Solly.....
196	Williamsport, Pa.....	Williamsport Commercial College.....	1863	F. M. Allen.....
197	Providence, R. I. (283 Westminster St.).	Providence Bryant & Stratton Busi- ness College.	1863	T. B. Stowell.....
198	Providence, R. I. (174 Westminster St.).	Scholfield's Commercial College.....	1846	Albert G. Scholfield.....
199	Chattanooga, Tenn.....	Behm's Chattanooga Commercial College.	1875	Jeremiah Behm.....
200	Chattanooga, Tenn.....	Mountain City Business College.....	1836	D. M. Agey, president...
201	Knoxville, Tenn.....	Knoxville Business College.....	1834	J. T. Johnson.....
202	Memphis, Tenn.....	Leaddin's Business College.....	1864	W. T. Watson.....
203	Memphis, Tenn.....	Nelson's Business College.....	1837	A. E. Nelson.....
204	Nashville, Tenn.....	Goodman's Business College.....	1865	Frank Goodman.....
205	Nashville, Tenn.....	Jennings' Business College.....	1834	R. W. Jennings.....
206	Washington College, Tenn.	Christie's Music and Business Col- lege.	1877	H. R. Christie.....
207	Fort Worth, Tex.....	Fort Worth Business College.....	1879	F. P. Preuitt.....
208	Waco, Tex.....	Hill's Business College.....	1831	R. H. Hill.....
209	Burlington, Vt.....	Burlington Business College.....	1878	E. G. Evans
210	Lyndon Centre, Vt.....	Lyndon Commercial College.....	1833	Walter E. Ranger, M. A.
211	Waterbury Centre, Vt.....	Minard Commercial School*.....	1831	Asbury M. Marsh.....
212	Richmond, Va.....	Old Dominion Business College.....	1867	Geo. M. Nicol.....
213	Richmond, Va.....	Smithdeal Business College.....	1833	G. M. Smithdeal.....
214	Walla Walla, Wash. Ter.	Empire Business College and Nor- mal Institute.	1837	Cation Bros.....
215	Wheeling, W. Va.....	Wheeling Business College.....	1860	J. M. Frasher.....
216	Green Bay, Wis.....	Green Bay Business College.....	1863	J. N. McCunn.....
217	La Crosse, Wis.....	La Crosse Business College.....	1863	J. L. Wallace.....
218	Madison, Wis.....	North-Western Business College.....	1856	R. G. Deming and J. C. Proctor.
219	Milwaukee, Wis.....	Charles Mayer's Commercial College and Elementary Select School.	1876	Charles Mayer.....
220	Milwaukee, Wis.....	Spencerian Business College*.....	1863	R. C. Spencer.....
221	Milwaukee, Wis.....	Wilmot Business and Short-hand College.	1831	H. M. Wilmot.....
222	St. Francis Station, Wis	Pio Nono Commercial College*.....	1871	Charles Fessler.....

* Statistics of 1886-87.

and Business Colleges for 1887-88—Continued.

No. of Months in Full Course of Study.		Weeks in Scho- lastic Year.		Tuition.		In- struct- ors.		Students.				Volumes in Library.	Physical Training.
Day Course.	Evening Course.	Day Course.	Evening Course.	Day Course.	Evening Course.	Male.	Female.	Male.	Female.	Day Course.	Evening Course.		
5	6	7	8	9	10	11	12	13	14	15	16	17	18
6	12	51	5	\$70	\$25	3	.....	187	0	187	.....	.....	175
6	12	40	24	40	25	1	.....	18	4	12	10	.....	176
9	.....	48	24	60	20	5	.....	(516)	.....	407	139	.....	177
.....	.....	.....	.....	.....	.....	2	1	124	36	120	40	.....	None
6	.....	52	.....	.....	.....	5	2	200	160	360	.....	200	None
6-10	12-20	52	30	50	25	3	.....	172	4	128	48	110	None
4	8-10	52	52	6-28	8-33	2	0	125	90	125	90	24	None
4	5	.....	.....	50	30	2	1	361	209	371	199	875	.....
.....	.....	40	25	50	20	3	.....	90	20	60	50	200	None
.....	.....	50	32	100	37½	5	.....	218	42	210	50	100	.....
6	10	42	29	60	25	2	1	43	7	27	23	300	.....
6-10	.....	42	34	70	40	2	.....	55	20	75	.....	.....	None
10	.....	40	.....	50	.....	4	1	256	40	296	.....	.....	.....
α4	.....	52	30	50	24	3	.....	198	9	121	86	.....	.....
.....	.....	44	(26) (28)	120	25	20	1	826	104	585	345	240	None
15	.....	40	.....	0	.....	3	3	163	57	225	0	.....	None
5	12	41	28	65	30	18	9	672	731	1,171	232	500	None
4	6-8	52	26	50	25	9	.....	.....	.....	.....	.....	0	None
10	15	44	32	87½	37½	5	2	414	84	320	178	0	Military drill
9	.....	39	.....	.....	.....	2	1	52	15	67	.....	1,000	.....
.....	.....	52	40	50	.....	6	.....	215	43	125	133	.....	None
5	8	52	32	.....	.....	3	1	336	20	356	.....	.....	None
10	.....	42	20	100	20	7	1	254	77	258	73	200	None
.....	.....	47	36	100	40	3	1	184	44	137	41	180	None
.....	.....	.....	.....	.....	.....	1	.....	15	4	19	.....	.....	None
9	20	48	38	60	30	3	1	104	38	112	30	270	Calisthenics and mili- tary drill.
6	12	52	32	100	40	5	1	180	20	165	35	.....	.....
α6	α6	52	44	.....	.....	3	1	(220)	.....	(220)	.....	.....	None
12	12	52	52	75	50	5	.....	300	.....	(300)	.....	200	.....
6-9	.....	52	.....	60-90	.....	3	1	162	.....	162	0	.....	None
3	5	52	32	50	40	3	0	140	10	150	.....	.....	None
4	.....	36	.....	.....	.....	3	.....	75	68	143	.....	.....	.....
8	12	40	36	50	45	3	2	444	66	378	132	.....	.....
4	6	52	20	50	30	9	.....	230	50	250	30	100	.....
3	.....	40	24	60	16	2	1	82	16	71	27	0	None
94	.....	39	.....	30	.....	2	2	55	12	67	.....	730	.....
9	.....	36	.....	25½	.....	3	2	40	20	60	.....	600	.....
8	13	35	26	50	50	1	.....	47	1	32	16	570	.....
3-4	9-12	52	52	40	40	3	.....	36	7	26	17	53	None
9	24	39	39	60	36	3	.....	63	7	47	23	10	.....
5	12	52	52	40	30	5	2	239	29	155	113	0	None
6	12	51	25	50	25	4	1	143	52	195	.....	200	None
10	.....	52	16	.....	.....	3	0	153	14	125	42	326	None
6	.....	52	26	45	20	5	1	201	86	240	47	50	None
12	6	44	44	80	50	6	3	183	26	156	53	2,000	.....
6-9	12	48	25	100	35	4	3	256	53	232	77	.....	.....
6	10	52	52	60	45	3	1	94	46	103	37	.....	.....
40	.....	40	.....	180	.....	.....	.....	44	.....	44	.....	600	.....

a Average.

Institutions from which no information has been received for Two Successive Years.

Location.	Name.	Location.	Name.
Macon, Ga.....	Macon Commercial College.	St. Louis, Mo.....	Bryant & Stratton Business College.
Champaign, Ill.....	Champaign Business College.	New York, N. Y..	Packard's Business College.
Chicago, Ill.....	Bryant's Chicago Business College and Training School.	New York, N. Y..	Spencerian Metropolitan Business College.
Valparaiso, Ind.....	Northern Indiana Commercial College.	Toledo, Ohio.....	Ohio Business University.
Burlington, Iowa...	Elliott's Business College.	Zanesville, Ohio..	Zanesville Business College.
Lansing, Mich.....	Capital City Business College.	Oshkosh, Wis.....	Oshkosh Business College.

II.—NURSES' TRAINING SCHOOLS.

GENERAL REMARKS.

The training school connected with the Bellevue Hospital in New York City, established in 1873, was the first institution of the kind opened in this country. The object of its establishment was to educate a body of skilled nurses, suitable for the needs of hospitals and capable of being intrusted with the care of the sick at their own homes. During the same year schools similar in character were opened in New Haven, Conn., and in Boston, and their number has now increased to thirty-three.

Students attend lectures on anatomy, physiology and hygiene, obstetrics, and the principles of nursing and care of the sick, in addition to their training in the hospitals at the bedside of the patient. During the second year of the course they are sent to nurse in private families or in hospitals, as superintendents may think best. Examinations are held at stated periods to ascertain as nearly as possible the progress of each individual student, and her fitness for the work.

Evidence of a good common school education is a qualification essential for admission, and age limitations are fixed at from twenty to forty, or, in some of these schools, from twenty-five to thirty-five. During the year 1887, 386 applications for admission were received at the Bellevue training school, showing how large is the number of women who wish to avail themselves of this training. Of these applications 47 were accepted, preference in every case being given to women of superior education and acquirements.

Reports from these schools show that the demand for their graduates, both for private nursing and as superintendents and assistant superintendents of hospitals, largely exceeds the supply, and bears testimony to the excellence of the training received.

A training school for male nurses, in connection with New York City Charity Hospital, has been in existence one year, and, with the same object in view, a building has lately been erected on the grounds of Bellevue Hospital at a cost of \$100,000; Mr. D. D. Mills, of New York, was the donor.

The superintendent of Bellevue training school reports an application from Persia, and also one from Japan, for admission to that school, and a movement is on foot to establish in India a school for native women, to be educated by trained nurses and physicians.

The South Carolina training school, located at Charleston, has been inactive since 1886, from lack of funds for its maintenance.

TABLE 87.—Summary of Statistics of Training Schools for Nurses for 1887-88.

	Number of Schools.	Instructors.			Pupils.	Graduates in 1887-88.	Number of Volumes in Library.
		Male.	Female.	Total.			
North Atlantic Division—							
Vermont.....	1	5	1	6	20	4	.....
Massachusetts.....	5	32	23	55	291	82	1,795
Rhode Island.....	1	6	6	12	.....	10	.....
Connecticut.....	1				24	24	114
New York.....	13	{ 55 } ⁽⁵⁾	{ 18 }	73	429	162	1,105
New Jersey.....	2	12	2	14	32	11	110
Pennsylvania.....	3	5	6	11	122	78	220
Total.....	26	{ 115 } ⁽⁵⁾	{ 56 }	176	918	371	3,344
South Atlantic Division—							
District of Columbia.....	1	7	0	7	22	0	.....
Total.....	1	7	0	7	22	0	.....
North Central Division—							
Indiana.....	1	7	2	9	18	4	.....
Illinois.....	1				40	18	.....
Michigan.....	1	15	4	19	24	16	180
Minnesota.....	1	0	7	7	16	4	.....
Missouri.....	1	15	1	16	25	2	50
Total.....	5	37	14	51	123	44	230
Western Division—							
California.....	1	3	10	13	30	6	15
Total.....	1	3	10	13	30	6	15
North Atlantic Division.....	26	{ 115 } ⁽⁵⁾	{ 56 }	176	918	371	3,344
South Atlantic Division.....	1	7	0	7	22	0	.....
North Central Division.....	5	37	14	51	123	44	230
Western Division.....	1	3	10	13	30	6	15
Total for 1887-88.....	33	{ 162 } ⁽⁵⁾	{ 80 }	247	1,093	421	3,589
Total for 1886-87.....	31	.....	.....	195	989	335	.....
Increase.....	2	.....	.....	52	104	86	.....

TABLE 88.—Statistics of Training Schools for Nurses for 1887-88.

Post-office Address.	Name.	Year of First Opening.	Superintendent.	Salaries Paid Pupils.	Number of Years in Full Course of Study.		Instructors.		Pupils.	Graduates in 1887-88.	Volumes in Library.
					6	5	Male.	Female.			
1	2	3	4	5	6	5	7	8	9	10	11
1 San Francisco, Cal.....	Hospital for Children and San Francisco Training School for Nurses.	1882	Elizabeth M. Yates, M. D....	.....	2	.....	3	10	30	6	15
2 New Haven, Conn.....	Connecticut Training School for Nurses....	1873	Miss M. L. Creemer.....	.....	1 ¹ / ₂	.....	.....	.....	24	24	114
3 Washington, D. C. (1400 L St., N. W.).....	Washington Training School for Nurses....	1877	Mrs. A. R. Westfall, matron.....	.....	3	.....	7	0	22	0	.....
4 Chicago, Ill., 304 Honoré St.).....	Illinois Training School for Nurses (Cook County Hospital).	1881	Isabel A. Hampton.....	(a).....	2	.....	.....	.....	40	18	.....
5 Indianapolis, Ind.....	Flower Mission Training School for Nurses	1883	F. Hutcheson.....	.....	2	.....	7	2	18	4	.....
6 Boston, Mass.....	Boston City Hospital Training School for Nurses.	1879	Miss Lucy L. Drown.....	\$8 per month first year; \$12 second year.	2	.....	.....	14	123	30	679
7 Boston, Mass.....	Boston Training School for Nurses (Massachusetts General Hospital).	1873	Miss Anna C. Maxwell.....	\$10 per month first year; \$14 second year.	2	.....	20	3	64	15	890
8 Boston, Mass. (Dimock St.).....	Training School for Nurses (New England Hospital for Women and Children).	1872	Eugenia A. Hurd.....	\$150 for course.....	1 ¹ / ₂	.....	0	1	12	11	16
9 Somerville, Mass.....	McLean Asylum (Insane) Training School for Nurses.	1882	Miss L. E. Woodward.....	Men, \$23-\$25 per month; women, \$12-\$15.	2	.....	4	3	82	18	200
10 Worcester, Mass.....	City Hospital Training School for Nurses....	1883	Chas. A. Peabody.....	\$144 per year.....	2	.....	8	2	10	8	.....
11 Detroit, Mich.....	Farrand Training School for Nurses.....	1883	Miss H. A. Mitchell.....	\$6 per month first year; \$8 second year.	2	.....	15	4	24	16	180
12 Minneapolis, Minn.....	North-Western Training School.....	1882	Sarah R. Throckmorton.....	\$2-\$3 per week.....	1 ¹ / ₂	.....	0	7	16	4	.....
13 St. Louis, Mo. (1510 Lafayette Avenue.).....	St. Louis Training School for Nurses.....	1884	Miss Emma Louise Warr.....	\$10 per month first year; \$12 second year.	2	.....	15	1	25	2	50
14 Orange, N. J.....	Training School for Nurses, Orange Memorial Hospital.	1880	Miss Hanna W. Baker.....	\$90 first year; \$144 second year.	2	.....	0	1	30	9	50
15 Paterson, N. J. (Market St.).....	Paterson Training School for Nurses (Paterson General Hospital).	1883	Miss Margaret Orr.....	\$108 first year; \$126 second year.	2	.....	12	1	2	2	60
16 Brooklyn, N. Y. (cor. DeKalb Ave. and Raymond St.).....	Brooklyn Training School for Nurses (Brooklyn Hospital).	1880	Miss Mary A. Camp.....	\$7 per month first year; \$12 second year.	2	.....	6	2	52	14	300
17 Brooklyn, N. Y.....	Long Island College Hospital Training School for Nurses.	1883	Miss Ida L. Sutcliffe.....	\$9 per month first year; \$15 second year.	2	.....	9	5	33	13	.....

CHAPTER XVII.

EDUCATION OF SPECIAL CLASSES.

EDUCATION OF THE DEAF.

GENERAL REMARKS.

New institutions and buildings.—The Cathedral School for the Deaf at Cincinnati, Ohio, the dual institution for the colored at Austin, Tex., and Miss S. W. Keeler's articulation class in New York City are the new institutions reported in operation during the past year. The Cincinnati institution is under the control of the Archbishop of Cincinnati, and is in part supported by him. The manual method of instruction is followed at present, but the combined system is soon to be introduced. The new school in Wyoming, reported last year as ready to begin work, has failed to respond to inquiries from this Office. The Deaf-Mutes' Journal, a paper published in New York, is authority for the statement that a Chicago merchant proposes to give \$20,000 toward the establishment of an institution in which deaf-mutes shall receive "suitable training." The method of instruction to be adopted is not mentioned. A bill was introduced in the State senate of Ohio by Mr. Mack, of Cincinnati, during the last session of the Legislature, to establish schools for deaf-mutes in the city school districts of Cincinnati and Cleveland. Action was postponed until the next session.

A home, the "Sarah Fuller Home for Little Children who cannot Hear," was recently established at West Medford, near Boston, Mass. The oral method of instruction is employed. "It is not proposed to retain these children in the home after they are old enough to go to the Horace Mann School, only to prepare them for that and to utilize their earliest years before the organs of speech have lost their elasticity."

Another institution, known as the "Frentz School for the Deaf," enters upon its first year of existence at Oshkosh, Wis. The manual method is to be adopted, and the institution is supported by the State.

A private school, the "St. Mary's Institution for Deaf-Mutes," was opened during the year in St. Paul, Minn., but no report of its work has been received.

The main building of the Missouri institution at Fulton was destroyed by fire in February last, and is being reconstructed on an improved plan.

The Pennsylvania oral school at Scranton will soon have accommodations for forty additional pupils, and the Legislature of Washington Territory has appropriated \$30,000 for new buildings for the school at Vancouver.

Changes of the year.—The board of trustees of the Iowa institution at Council Bluffs has placed the educational and business departments under separate and independent heads. The system of double classes is abandoned, and the length of the school day increased by one hour spent in the school-room. The Cincinnati oral school has become a part of the public school system of that city, and is governed by its laws and regulations.

Methods.—By invitation of the "Royal Commission on the Blind, the Deaf and Dumb," etc., Dr. Alexander Graham Bell went over to England during the past summer to give the commission information about American schools. A short time before his departure Dr. Bell sent a circular letter to the superintendents and principals of American and Canadian schools for the deaf, asking for information as to methods employed in their institutions, and for opinions on the various methods and on other points of interest and importance. The replies were collected together and published. Thirty-nine American schools reported the combined method; 16 purely oral; 8 manual; 3 manual and oral, and 1 manual, oral, and combined; 43 schools report 2,308 pupils in articulation, and with 1,333 of this number articulation is used as the means of instruction; 855 are congenitally deaf, or became deaf before two years of age.

Auricular instruction.—The attempt to cultivate and improve the hearing of the deaf by this method of instruction is rapidly growing in favor. Eight years ago an experimental class of semi-deaf was organized in the Nebraska Institute for the Deaf and Dumb, and the results proved satisfactory. The superintendent of this institution, in reply to Professor Bell's circular letter of inquiry, says: "We have sixteen (pupils) under aural instruc-

tion; of these, nine will leave school as hard-of-hearing speaking people, with perhaps no greater degree of disadvantage from deafness than those who have become partially deaf in adult life.

"After eight years of experience in this work and of observation elsewhere, it is my belief that at least 15 per cent. of our deaf-mute population are fit subjects for aural instruction, and that a majority of these can be graduated as hard-of-hearing speaking people, and the condition of the remainder greatly elevated above that of the ordinary deaf-mute.

"As to what takes place in a scientific point of view in aural work, my opinion is that in some cases there is a development in the hearing power, as well as improvement due to an increased knowledge of spoken language. In the majority of cases I think it proper to say that there is an improvement in both directions."

He regards the small class-room bell as the best means of testing the hearing power of pupils, and thinks the ordinary flexible tube superior to the audiphone as an artificial aid, the value of the latter depending upon "the cause of deafness and condition of the auditory nerve and of the teeth."

Prof. E. H. Currier, of the New York Institution for the Deaf and Dumb, in reply to Professor Bell's inquiries, says: "The work of developing the latent hearing of such pupils as we find, upon careful examination, possess any appreciation of sound, has been carried on in this institution for nearly two years with the most gratifying as well as the most convincing results.

"That the hearing power is increased I will not claim, but it is certain that voice sounds are more readily recognized and interpreted after a systematic course of aural training. * * *

"About 17 per cent. of our pupils have the ability to comprehend sounds to a degree sufficient to warrant the training of the auditory apparatus to perform, with instrumental aid, the functions which belong to the organ of hearing in its normal condition."

Nineteen of the institutions for the deaf give aural instruction, and 274, or about 3½ per cent. of the whole number of the deaf under instruction in the institutions of the United States, receive some training by this method.

Several interesting operations for deafness by excision of the drum-head were performed by Dr. Samuel Sexton, of New York, and reported in the Medical Record of December 31, 1887. In the five reported cases in which deafness was due to various causes the results were very satisfactory, the hearing power in each case being greatly increased. It is believed that certain forms of deafness will henceforth be removable.

Convention.—The Sixth Conference of Principals and Superintendents of American Institutions for the Deaf was held at the Mississippi institution, Jackson, Miss., April 14-17, 1888. The published report of the proceedings has not yet been issued, but we quote from a brief notice of the convention which appeared in the July number of the "American Annals of the Deaf." "The attendance was the largest of any conference that has yet been held, numbering twenty-four regular and thirty-four honorary members, representing twenty-four States and the Dominion of Canada. Among the honorary members were several trustees and directors of institutions.

"Mr. J. L. Noyes, superintendent of the Minnesota school, was the president of the conference, and Mr. S. T. Walker, superintendent of the Kansas institution, secretary.

"The principal subjects of discussion, including several valuable papers, were moral and religious instruction, the acquisition of verbal language, auricular training, the relations of trustees and superintendents, and of superior and inferior officers, the importance of thoroughness in primary instruction, the legal relations of the deaf, and day schools. The session of Sunday evening was devoted to a memorial service in memory of Thomas Hopkins Gallaudet. * * *

"The members of the conference were entertained with genuine Southern hospitality by Mr. Dobyns and his associates of the Mississippi institution, and the occasion was in all respects exceedingly pleasant both for guests and hosts."

NOTES FROM CATALOGUES, RETURNS, ETC.

COLORADO.

Colorado Institution for the Education of the Mute and Blind, Colorado Springs, Colo.—Instruction is given in aural development in this institution, and more time is devoted than formerly to articulation and lip-reading.

CONNECTICUT.

American Asylum for the Education of the Deaf and Dumb, Hartford, Conn.—A legacy of \$500 was left to this school by the late Rev. W. W. Turner, the income from which is to be expended annually for prizes to the graduating class. Pupils over twelve years of age are given three hours' daily instruction in cabinet-making, shoemaking, and tailoring.

DISTRICT OF COLUMBIA.

National Deaf-Mute College, Washington, D. C.—Six young women were admitted to this institution during the past year, in accordance with the recent decision to admit female students for an experimental period of two years. They represent the States of Illinois, Indiana, Maryland, Nebraska, and Pennsylvania. They are under the charge of the matron of the institution, who lives with them in the president's house, and they recite with the young men of the introductory class.

INDIANA.

Evansville Deaf-Mute Institute, Evansville, Ind.—At present this school is supported by municipal appropriation, and instruction is given by the manual method. It is, however, soon to become a State institution, and the "combined method" will be introduced. The older pupils are prepared for admission to the National Deaf-Mute College, at Washington, D. C. No provision is made for industrial training.

MASSACHUSETTS.

Horace Mann School for the Deaf, Boston, Mass.—An act of the State Legislature of April 19, 1883, authorizes the Governor to provide for the travelling expenses of deaf children attending school. Auricular perception is cultivated to a limited extent in this institution; each teacher endeavors to train the hearing of the pupils in her class by raising the voice, at the same time directing their attention to her lips.

NEW MEXICO.

New Mexico School for the Deaf and Dumb, Santa Fé, N. Mex.—The manual method of instruction is wholly followed in this institution. It is hoped that the next Territorial Legislature will make appropriation for new buildings, the present quarters not being adapted to the needs of the school. No provision is made for industrial training.

NEW YORK.

New York Institution for the Instruction of the Deaf and Dumb, New York, N. Y.—The method followed in this school is the combined. The course of instruction goes beyond the grammar grade of public schools; mental and moral science, chemistry, astronomy, Latin, Greek, mathematics, etc., are taught.

PENNSYLVANIA.

Pennsylvania Institution for the Deaf and Dumb, Philadelphia, Pa.—There has been a change in the method of instruction in this institution during the past year; the manual and oral departments now form two separate and distinct schools under the same general management. Hitherto the method pursued has been the general instruction of all pupils by signs with special training of a part of them in articulation and lip-reading. Carpentry, shoemaking, tailoring, printing, etc., are taught.

WISCONSIN.

Wisconsin School for the Deaf, Delavan, Wis.—A cottage has been reconstructed and fitted up as a hospital and home for the younger boys. The combined method is employed and instruction is given in carpentry, shoemaking, printing, etc.

Milwaukee Day School for the Deaf, Milwaukee, Wis.—This institution belongs to the city public school system and also receives State aid. The controlling body is the board of city school commissioners and the State superintendent of education. The method of instruction is oral.

TABLE 89.—Summary of Statistics of Institutions for the Deaf for 1887-88—Continued.

State.	Number of Institutions.	Instructors.			Pupils.					Receipts.	Expenditures.	Number of Volumes in Library.
		Male.	Female.	Total.	Articulation and Lip-Reading.	Male.	Female.	Total.	Articulation.				Lip-Reading.	Articular Perception.
South Central Division—Continued.												
Texas.....	2	6	5	11	1	{	{ ⁽²⁵⁾ 84 57	166	34	34	.....	640
Arkansas.....	1	2	4	6	1	56	56	112	23	23	13	243
Total.....	9	34	27	61	6	{ ⁽²⁵⁾ 535	{ 421	981	129	96	19	6,283
North Central Division:												
Ohio.....	4	14	15	29	4	276	253	529	115	115	.....	2,000
Indiana.....	2	10	10	20	1	184	139	323	48	48	.....	3,643
Illinois.....	4	10	22	32	7	{ ⁽³²⁾ 336	{ 243	631	212	212	57	10,100
Michigan.....	2	10	10	20	4	{ ⁽³⁷⁾ 163	{ 137	337	112	36	.....	3,212
Wisconsin.....	4	6	17	23	12	211	124	335	106	100	3	40,343
Minnesota.....	1	7	4	10	2	105	69	174	80	80	10	1,200
Iowa.....	1	6	12	19	.....	185	138	323	.....	.....	.....	1,250
Missouri.....	3	8	9	17	3	182	156	338	69	69	.....	3,500
Dakota.....	1	2	2	4	.....	10	10	20	.....	.....	.....	1,100
Nebraska.....	1	4	4	8	2	87	63	150	33	33	15	1,100
Kansas.....	1	6	10	16	16	131	104	235	70	70	12	250
Total.....	24	83	115	198	51	{ ⁽⁸⁹⁾ 1,870	{ 1,436	3,395	845	763	97	553,462
Western Division:												
Colorado.....	1	3	3	6	2	32	30	62	15	15	0	500
New Mexico.....	1	1	0	1	0	3	3	6	0	0	.....	905
Utah.....	1	1	1	2	.....	13	13	26	.....	.....	.....	1,600
Washington.....	1	1	1	2	2	12	8	20	.....	.....	.....	7,300
Oregon.....	1	1	1	2	1	14	13	27	5	.....	.....	6,850
California.....	1	6	2	8	2	79	51	130	27	27	.....	46,729
Total.....	6	15	8	23	7	153	118	271	47	42	.....	118,758
Total.....	6	15	8	23	7	153	118	271	47	42	.....	1,657

SUMMARY.

North Atlantic Division.....	20	44	151	195	113	{ 1,331 (295) 1,046 }	2,672	1,308	1,641	152	624,922	635,437	18,803
South Atlantic Division.....	10	45	26	71	13	{ 392 (182) 219 }	793	201	192	6	219,965	164,422	15,337
South Central Division.....	9	34	27	61	6	{ 535 (25) 421 }	981	129	96	19	102,411	108,189	6,283
North Central Division.....	24	83	115	198	51	{ 1,870 (89) 1,435 }	3,335	845	763	97	553,462	675,167	27,355
Western Division.....	6	15	8	23	7	{ 153 118 }	271	47	42	.....	118,738	76,634	1,657
Total for 1887-88	69	221	327	548	190	{ 4,281 (591) 3,240 }	8,112	2,530	2,734	274	1,619,518	1,719,849	69,435
Total for 1886-87	65	.....	.....	563	.....	.....	7,646	.....	.....	.....	1,531,287	1,689,167	.....
Increase.....	4	.....	.....	Da15	.....	.....	466	.....	.....	.....	88,231	30,682	.....

^a Instructors in the Industrial Department are not included this year; hence the apparent decrease.

TABLE 90.—Statistics of Institutions for the Deaf for 1887-88, from replies to inquiries by the United States Bureau of Education.—PART I.

Post-office Address.	Name.	Year of First Opening.	Controlling Body.			Executive.		
			Name.	No.	Term.	By Whom Appointed.	Name.	Title.
1	2	3	4	5	6	7	8	9
1 Talladega, Ala.....	Alabama Institution for the Deaf.	1858	Board of commissioners.	8	6 years.	Governor and Senate.	J. H. Johnson.....	Principal.....
2 Little Rock, Ark.	Arkansas Deaf-Mute Institute.	1867	Board of trustees.	6	2 years.	Governor.....	Francis D. Clarke.....	Principal.....
3 Berkeley, Cal	Institution for the Deaf and the Blind.	1860	Board of directors.	5	4 years.	Governor.....	W. Wilkinson.....	Principal.....
4 Colorado Springs, Colo.	Institution for the Education of the Mute and the Blind.	1874	Board of trustees.	5	6 years.	Governor, endorsed by Senate.	John E. Ray, M. A.....	Superintendent...
5 Hartford, Conn.	American Asylum for the Education of the Deaf and Dumb.	1817	Board of directors.	19	Life.....	Board is "self-perpetuating."	Job Williams.....	Principal.....
6 Mystic Bridge, Conn.	Whipple's Home School.....	1868	.....	.....	.....	.....	Margaret Hammond.	.....
7 Sioux Falls, Dak.	Dakota School for Deaf-Mutes.*	1880	.....	.....	.....	.....	James Simpson.....	Principal.....
8 Washington, D. C.	Columbia Institution for the Deaf, National and Dumb.	1857	Board of directors.	11	a Life....	(b)	E. M. Gallaudet, LL. D., Ph. D.	President.....
9 St. Augustine, Fla.	Florida Blind and Deaf-Mute Institute.	1864	Board of directors.	11	a Life....	(b)	E. M. Gallaudet, LL. D., Ph. D.	President.....
10 Cave Spring, Ga..	Georgia Institution for the Deaf and Dumb.	1885	Board of managers.	4	4 years.	By the People.	Park Terrell.....	Principal.....
11 Chicago, Ill.....	Chicago Day Schools for Deaf-Mutes.	1846	Board of trustees.	7	Life.....	Governor.....	W. O. Connor.....	Principal.....
12 Chicago, Ill.....	Ephipheta School.....	1875	City board of education.	.....	.....	.....	Philip A. Emery, M. A., D. D.	Principal.....
13 Englewood, Ill. (Wabash Avenue, near Sixty-third Street),	Voice and Hearing School for the Deaf.	1884	Ephipheta society.	25	1 year...	.....	Miss Mary C. Hendrick.	Principal.....
14 Jackson, Ill.....	Illinois Institution for the Education of the Deaf and Dumb.	1846	Board of trustees.	3	6 years.	Governor, with approval of the Senate.	Mary McGowan.....	Principal.....
							Philip G. Gillett, M. A., LL. D.	Superintendent...

Trustees.

15	Evansville, Ind....	Evansville Deaf-Mute School.	1896	Board of trustees.	3	3 years.	City Council.	Charles Kerney.....	Principal.....	Board of trustees.
16	Indianapolis, Ind.	Indiana Institution for the Education of the Deaf and Dumb.	1844	Board of trustees.	3	4 years.	Legislature.....	Eli P. Baker.....	Superintendent...	Board of trustees.
17	Council Bluffs, Iowa.	Iowa Institution for the Deaf and Dumb.*	1859	Board of trustees.				G. L. Wyckoff.....	Superintendent...	Board of trustees.
18	Olathe, Kan.....	Kansas Institution for the Education of the Deaf and Dumb.	1861	Board of trustees of Kansas State charitable institutions.	5	2 years.	Governor, approved by the Senate.	S. T. Walker, M. A....	Superintendent...	Board of trustees.
19	Danville, Ky.....	Kentucky Institution for the Education of Deaf-Mutes.	1823	Board of commissioners.	12	6 years.	Governor, confirmed by the Senate.	W. K. Argo.....	Superintendent...	Board of commissioners.
20	Baton Rouge, La..	Louisiana Institution for the Education of the Deaf and Dumb.*	1852	Public schools.				John Jastromski.....	Superintendent...	
21	New Orleans, La..	New Orleans Public School for Deaf-Mutes.	1836	Public schools.				{ Hon. Ulrie Bettison, R. W. Lawrence.....	Superintendent... Principal.....	
22	Portland, Me.....	Portland School for the Deaf.	1876	Board of trustees.				Ellen R. Barton.....	Principal.....	School board.
23	Baltimore, Md.	Maryland School for the Colored Blind and Deaf-Mutes.	1872	Board of trustees.	6	1 year.	(c)	Frederick D. Morrison. F. Knapp.....	Superintendent... Principal.....	Board of trustees.
24	Baltimore, Md....	Mr. Knapp's Institute.	1878	Board of visitors.	35	Life.	Governor.....	Charles W. Ely, M. A.	Principal.....	Board of visitors.
25	Frederick, Md....	Maryland School for the Deaf and Dumb.	1868	Board of trustees.	10	Indefinite.		George Roundy.....	Principal.....	Board of trustees.
26	Beverly, Mass....	New England Industrial School for Deaf-Mutes.	1879	Board of trustees.				Sarah Fuller.....	Principal.....	School board.
27	Boston, Mass. (63 Warren St.).	Horace Mann School for the Deaf.	1869	City school board.				Caroline A. Yale.....	Principal.....	Corporation.
28	Norhampton, Mass.	Clarke Institution for Deaf-Mutes.	1857	Corporation.	12	Indefinite.	Vote of corporation.	M. T. Cass, M. A.....	Superintendent...	Board of trustees.
29	Flint, Mich.	Michigan School for the Deaf.	1854	Board of trustees.	3	6 years.	Governor.....	Rev. J. A. Hügeli, J. L. Noyes.....	President..... Superintendent...	Board of directors. Board of directors.
30	Norris, Mich.....	Evangelical Lutheran Deaf-Mute Institution.	1874	Board of directors.	9	1 year.	The society....	J. R. Dobyns, M. A....	Superintendent...	Board of trustees.
31	Faribault, Minn.	Minnesota School for the Deaf.	1863	Board of directors.	7	5 years.	Governor, confirmed by Senate.	W. D. Kerr, M. A.....	Superintendent...	Board of commissioners.
32	Jackson, Miss....	Mississippi Institution for the Deaf and Dumb.	1854	Board of trustees.	5	2 years.	Governor, approved by the Senate.	Mother M. Adele.....	Principal.....	Superior gen-eral.
33	Fulton, Mo.....	Missouri Institution for the Education of the Deaf and Dumb.	1852	Board of commissioners.	5		Governor.....		Superintendent...	Board of commissioners.
34	St. Louis, Mo. (1819 Cass Ave.).	Convent of Maria Constila Deaf-Mute Institution.	1855	Sisters of St. Joseph.						

b One by the President of the Senate; one by the Speaker of the House of Representatives, and eight by the Corporation of the Institution.
c Presidents of Maryland School for Blind, and Maryland School for Deaf.

* From Report of the Commissioner of Education for 1889-97.
a Three for the term of one Congress.

TABLE 90. — *Statistics of Institutions for the Deaf, etc.* — PART I — Continued.

Post-office Address.	Name.	Year of First Opening.	Controlling Body.				Executive.		
			Name.	No.	Term.	By Whom Appointed.	Name.	Title.	By Whom Appointed.
1	2	3	4	5	6	7	8	9	10
35 St. Louis, Mo., (cor. Ninth and Washington Sts.), Omaha, Nebr.	St. Louis Day School for Deaf-Mutes.	1878	City board .....	.....	.....	.....	Delos A. Simpson, B. A.	Principal.....	School board.
36 Nebraska Institute for the Deaf and Dumb.	Nebraska Institute for the Deaf and Dumb.	1869	Board of public lands and buildings.	4	.....	.....	John A. Gillespie, M. A.	Principal.....	Governor.
37 Chambersburg, near Trenton, N. J.	New Jersey School for Deaf- Mutes.	1833	Board of trustees..	11	4 years.	Governor, and con- firmed by the Senate. Legislature ..	Weston Jenkins	Superintendent ...	Board of trustees.
38 Santa Fé, N. Mex.	New Mexico School for the Deaf and Dumb.	1855	Committee a	3	2 years.	.....	Lars M. Larson, B. A.	Superintendent ...	The committee.
39 Buffalo, N. Y. (125 Edw St.).	Le Contoux St. Mary's In- stitution for the Improved Instruction of Deaf-Mutes.	1861	Board of trustees..	7	Indefi- nite.	Self-perpetu- ating.	Sister Mary Anne Burke.	Principal.....	Board of trustees.
40 Fordham, N. Y. .	St. Joseph's Institute for Im- proved Instruction of Deaf- Mutes.	1869	Board of mana- gers.	7	1 year.	.....	Madam Ernestine Hardin.	President	Trustees.
41 Malone, N. Y.	Northern New York Institu- tion for Deaf-Mutes.	1834	Board of trustees..	15	3 years.	.....	Henry C. Rider	Superintendent ...	Board of trustees.
42 New York, N. Y. .	Articulation Class for Deaf- Mutes.	1886	.....	.....	.....	.....	Miss S. W. Keeler	Principal.....	Board of trustees.
43 New York, N. Y. (Lex. Avenue, bet. 67th and 68th Sts.).	Institution for the Improved Instruction of Deaf-Mutes.	1867	Association for the Improved Instruction of Deaf-Mutes.	15	3 years.	Association ..	D. Greenberger	Principal.....	Board of trustees.
44 New York, N. Y. (Washington Heights.)	New York Institution for the Instruction of the Deaf and Dumb.	1818	Board of direc- tors.	24	3 years.	.....	(Isaac Lewis Pert, L. L. D. Channcey N. Brain- erd.	Principal.....	Board of direc- tors.
45 Rochester, N. Y. (945 N. St. Paul St.).	Western New York Institu- tion for Deaf-Mutes.	1876	Board of trustees..	15	Life.	Self-perpetu- ating.	Z. F. Westervelt.....	Superintendent ...	Board of trustees.

46	Rome, N. Y.....	Central New York Institution for Deaf-Mutes.	1875	Board of trustees..	15	3 years.	.....	Edward Beverly Nelson, B.A.	Principal.....	Board of trustees.
47	Raleigh, N. C.....	North Carolina Institution for the Deaf and Dumb and the Blind.	1845	Board of trustees..	7	6 years.	Governor, confirmed by Senate.	W. J. Young.....	Principal.....	Board of trustees.
48	Cincinnati, Ohio..	Cathedral School for the Deaf.	1887	.....	.....	.....	.....	E. P. Cleary.....	Principal.....	Archbishop of Cincinnati.
49	Cincinnati, Ohio..	Cincinnati Deaf-Mute Day School.	1875	F. C. Yuncenstein ..	3	1 year.	Pres. of Board of Education.	Alfred F. Wood ..	Principal.....	Board of Education.
50	Cincinnati, Ohio..	Oral School for the Deaf.....	1886	.....	.....	.....	.....	L. S. Feehelmeiser ..	President	Elected.
51	Columbus, Ohio ..	Ohio Institution for the Education of the Deaf and Dumb.	1828	Board of trustees..	5	5 years.	Governor	Amasa Pratt	Superintendent ..	Board of trustees.
52	Salem, Oregon	Oregon School for Deaf-Mutes.	1870	Board of directors.	9	6 years.	"Self-perpetuating."	Rev. P. S. Knight ..	Superintendent ..	Directors.
53	Philadelphia, Pa..	Pennsylvania Institution for the Deaf and Dumb.	1821	Board of directors.	27	3 years.	.....	A. L. E. Crouter, M.A.	Principal.....	Board of directors.
54	Philadelphia, Pa. (16 South Broad St.).	Private School for Teaching Deaf Children to Speak.	1835	Managing committee.	3	Indefinite.	"Self-appointed."	Mary S. Garrett.....	Principal.....	Managing committee.
55	Seranton, Pa.	Pennsylvania Oral School for the Deaf.	1883	.....	.....	.....	.....	Emma Garrett.....	Principal.....	Board of directors.
56	Wilkinsburg, Pa..	Western Pennsylvania Institution for the Instruction of the Deaf and Dumb.	1876	Board of trustees..	27	3 years..	Self-elected.....	John G. Brown.....	Principal.....	Board of trustees.
57	Providence, R. I. ..	Rhode Island State School for the Deaf.	1877	State Board of Education.	8	3 years..	Legislature.....	Anna M. Black.....	Principal.....	State board of Education.
58	Cedar Spring, S.C.	South Carolina Institution for the Education of the Deaf and Dumb and the Blind.	1849	Board of commissioners.	5	Indefinite.	Governor.....	Newton F. Walker....	Superintendent...	Board of commissioners.
59	Knoxville, Tenn.	Tennessee School for Deaf and Dumb.	1845	Board of trustees..	13	Indefinite.	Elected.....	Thos. L. Moses	Principal.....	Board of trustees.
60	Austin, Tex.....	School for Colored Deaf-Mutes and Blind.	1887	.....	.....	.....	.....	W. H. Holland.....	Superintendent...	.....
61	Austin, Tex.....	Texas Deaf and Dumb Asylum.	1857	Board of trustees..	5	2 years..	Governor.....	W. A. Kendall.....	Superintendent...	Board of trustees.
62	Salt Lake City, Utah.	Deaf-Mute Department of the University of Deseret.	1884	Board of regents..	13	2 years..	Legislature.....	Henry C. White.....	Principal.....	Board of regents.
63	Staunton, Va.....	Virginia Institution for the Education of the Deaf and Dumb and the Blind.	1839	Board of directors.	9	3 years..	Governor.....	Thomas S. Doyle.....	Principal.....	Board of directors.
64	Vancouver, Wash.	Washington School for Deaf and Blind Youth.	1886	Board of trustees..	5	5 years..	Governor.....	Jas. Watson.....	Director.....	Board of trustees.
65	Romney, W. Va....	West Virginia School for the Deaf and the Blind.	1870	Board of regents..	7	4 years..	Governor.....	C. H. Hill.....	Principal.....	Board of regents.
66	Delavan, Wis.....	Wisconsin School for the Deaf.	1852	Board of supervision.	5	5 years..	Governor	John W. Swiler.....	Superintendent ..	Board of supervision.

a Consists of the Attorney-General, Auditor, and Treasurer of New Mexico.

TABLE 90.—*Statistics of Institutions for the Deaf, etc.*—PART I—Continued.

Post-office Address.	Name.	Year of First Opening.	Controlling Body.				Executive.		
			Name.	No.	Term.	By Whom Appointed.	Name.	Title.	By Whom Appointed.
1	2	3	4	5	6	7	8	9	10
67 La Crosse, Wis.,....	Oral Department of Public Schools, for Instruction of Deaf-Mutes, Milwaukee Day School for the Deaf. St. John's Catholic Deaf-Mute Institute.	1836	Board of education.	7	2 years..	Elected by Common Council.	Albert Hardy...	Superintendent of city schools.	Board of education.
68 Milwaukee, Wis. (Cor. Prairie and State Sts.),		1883	School board and State Superintendent of Education.	.....	.....	.....	Paul Binner	Principal.....	School board and State Superintendent of Education.
69 St. Francis Station, Wis.		1876	Archbishop of Milwaukee and his Vicar-General.	2	Life.....	.....	Rev. Chas. Fessler....	President.....	Archbishop of Milwaukee.

TABLE 90.—Statistics of Institutions for the Deaf, etc.—PART II.

Name.	Instruction is Given—										Physical Training.
	By Combined Method.										
	By Kindergarten Methods.	In Academic Studies.	In Auricular Perception.	By Oral Method.	By Manual Method.	A.	B.	C.	D.		
2	11	12	13	14	15	16	17	18	19	20	21
1 Alabama Institution for the Deaf	No	No	No	Yes	Yes	No	No	No	No	Six	None.
2 Arkansas Deaf-Mute Institute	No	No	Yes	No	No	No	Yes	Yes	No	Five	Gymnasium fitted up with Dr. Sargent's apparatus.
3 Institution for the Deaf and the Blind	No	Yes	No	No	No	No	Yes	No	No	Five	None.
4 Institution for the Education of the Mute and the Blind.	No	No	No	No	No	No	Yes	Yes	No	Five	None.
5 American Asylum for the Education of the Deaf and Dumb.	No	No	No	No	No	No	Yes	No	No	Five	None.
6 Whipple's Home School.	No	No	No	Yes	No	No	No	No	No	Five	None.
7 Dakota School for Deaf-Mutes*	No	No	No	No	No	No	Yes	No	No	Five	{ Gymnasium, with instructor.
8 Columbia Institute for { Kendall School	No	Yes	No	No	No	Yes	No	No	No	Five	
9 the Deaf and Dumb, { National College.	Yes	Yes	No	No	No	No	No	Yes	No	Four	None.
10 Florida Blind and Deaf-Mute Institute	No	No	No	No	Yes	No	No	No	No	Six	None.
11 Georgia Institution for the Deaf and Dumb.	No	No	No	No	No	No	Yes	No	No	Four	Calisthenic exercises.
12 Chicago Day Schools for Deaf-Mutes.	No	No	No	No	No	No	No	Yes	No	Five	Gymnasium, under instructor.
13 Ephipheta School.	No	No	Yes	No	No	No	No	No	No	Six	
14 Voice and Hearing School for the Deaf	Yes	No	Yes	No	No	No	Yes	No	No	Four	
15 Illinois Institution for the Education of the Deaf and Dumb.	No	Yes	No	No	Yes	No	No	No	No	Five and a half	None.
16 Evansville Deaf-Mute School	No	Yes	No	No	No	No	Yes	No	No	Five	
17 Indiana Institution for the Education of the Deaf and Dumb.	No	No	No	No	No	No	Yes	No	No	Five	Gymnastics and calisthenic drill.
18 Iowa Institution for the Deaf and Dumb*.	No	No	Yes	No	No	No	Yes	No	No	Five	None.
19 Kansas Institution for the Education of the Deaf and Dumb.	No	No	No	No	No	No	No	Yes	No	Five	
20 Kentucky Institution for the Education of Deaf-Mutes.	No	No	No	No	No	No	No	No	No	Five	

* From the Report of the Commissioner of Education for 1886-87.

a In exceptional cases pupils are fitted for the university.

b "Manual method is employed only in the instruction of those who begin their education too late to be benefited by oral instruction."

TABLE 90.—Statistics of Institutions for the Deaf, etc.—PART II—Continued.

Name.	Instruction is Given—						Number of Hours of Instruction.	Physical Training.			
	By Combined Method.										
	By Kindergarten Methods.	In Academic Studies.	In Auricular Perception.	By Oral Method.	By Manual Method.	A. B. C. D.					
2	11	12	13	14	15	16	17	18	19	20	21
20 Louisiana Institution for the Education of the Deaf and Dumb.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
21 New Orleans Public School for Deaf-Mutes.	No	No	No	No	Yes	No	No	No	No	Five	None.
22 Portland School for the Deaf.	No	No	Yes	Yes	No	No	No	No	No	Five	None.
23 Maryland School for the Colored Blind and Deaf-Mutes.	No	No	No	No	Yes	No	No	No	No	Six	.....
24 Mr. Knapp's Institute.	Yes	Yes	Yes	No	No	No	No	Yes	No	Five	Daily drill with light dumb-bells.
25 Maryland School for the Deaf and Dumb.	No	No	No	No	No	Yes	No	No	No	Five	.....
26 New England Industrial School for Deaf-Mutes.	No	No	Yes	Yes	No	No	No	No	No	Five	.....
27 Horace Mann School for the Deaf.	No	No	Yes	Yes	No	No	No	No	No	Five	Gymnastics are a part of each day's work.
28 Clarke Institution for Deaf-Mutes.	No	Yes	Yes	Yes	No	No	No	No	No	Five	Gymnastics.
29 Michigan School for the Deaf.	No	Yes	No	No	No	No	Yes	No	No	aSix	.....
30 Evangelical Lutheran Deaf-Mute Institution.	No	No	Yes	Yes	No	No	No	No	No	Five and a half	None.
31 Minnesota School for the Deaf.	No	No	Yes	No	No	No	Yes	No	No	Five	Gymnasium.
32 Mississippi Institution for the Deaf and Dumb.	No	Yes	Yes	No	No	No	Yes	No	No	Five	Gymnasium.
33 Missouri Institution for the Education of the Deaf and Dumb.	No	.....	.....	No	No	No	(b)	.....	.....	Five	.....
34 Convent of Maria Consilia Deaf-Mute Institute.	No	.....	.....	No	No	No	Yes	No	No	Five	.....
35 St. Louis Day School for Deaf-Mutes.	.....	No	Yes	No	Yes	No	No	No	No	Five	.....
36 Nebraska Institute for the Deaf and Dumb.	.....	No	No	No	No	No	Yes	No	No	Five	.....
37 New Jersey School for Deaf-Mutes.	No	No	No	No	No	No	Yes	Yes	No	Five	.....
38 New Mexico School for the Deaf and Dumb.	No	No	No	No	Yes	No	No	No	No	Five	None.
39 Le Contoux St. Mary's Institution for the Improved Instruction of Deaf-Mutes.	Yes	No	Yes	No	No	Yes	No	Yes	No	Four	Calisthenics.

		No	Yes	Yes	No	Yes	No	No	Yes	No	No	No	No	Four	Calisthenics.
40	St. Joseph's Institute for Improved Instruction of Deaf-Mutes.	No	No	No	No	No	No	No	No	No	No	No	No	Four	None.
41	Northern New York Institution for Deaf-Mutes.	No	No	No	No	No	No	No	No	No	No	No	No	Five	None.
42	Articulation Class for Deaf-Mutes.	Yes	Yes	No	Yes	No	No	No	No	No	No	No	No	Four and a half	Calisthenics and Gymnas-
43	Institution for the Improved Instruction of Deaf-Mutes.	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	Five	tics.
44	New York Institution for the Instruction of the Deaf and Dumb.	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	Eight	None.
45	Western New York Institution for Deaf-Mutes.	Yes	Yes	No	Yes	No	No	No	No	No	No	No	No	Four	Calisthenics and Gymnas-
46	Central New York Institution for Deaf-Mutes.	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	No	No	No	Five	tics.
47	North Carolina Institution for the Deaf and Dumb and the Blind.	No	Yes	Yes	No	Yes	No	No	No	No	No	No	No	Six	Gymnasium.
48	Cathedral School for the Deaf.	No	Yes	No	No	No	No	No	No	No	No	No	No	Five and a half	None.
49	Cincinnati Deaf-Mute Day School.	No	No	No	Yes	No	No	No	No	No	No	No	No	Five	Calisthenics.
50	Oral School for the Deaf.	Yes	Yes	No	No	No	No	No	No	No	No	No	No	Five and a half	None.
51	Ohio Institution for the Education of the Deaf and Dumb.	No	Yes	Yes	No	No	No	No	No	No	No	No	No	Five and a half	None.
52	Oregon School for Deaf-Mutes.	No	No	No	No	No	No	No	Yes	No	No	No	No	Seven	None.
53	Pennsylvania Institution for the Deaf and Dumb.	No	eYes	No	No	No	No	No	No	No	No	No	Yes	Five	Gymnastics.
54	Private School for Teaching Deaf Children to Speak.	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	Four and a half	None.
55	Pennsylvania Oral School for the Deaf.	No	No	Yes	No	Yes	No	No	No	No	No	No	No	Five	None.
56	Western Pennsylvania Institution for the Instruction of the Deaf and Dumb.	No	No	No	No	No	No	No	Yes	No	No	No	No	Five	None.
57	Rhode Island State School for the Deaf.	No	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	Four	None.
58	South Carolina Institution for the Education of the Deaf and Dumb and the Blind.	No	Yes	Yes	No	No	No	No	No	No	No	Yes	No	Six	None.
59	Tennessee School for Deaf and Dumb.	No	No	No	No	No	No	No	No	No	No	No	No	Five	None.
60	School for Colored Deaf-Mutes and Blind.	Yes	Yes	No	No	No	No	No	No	No	No	No	No	Six	Calisthenics for the girls;
61	Texas Deaf and Dumb Asylum.	No	No	No	No	No	No	No	No	No	No	No	No	Five	gymnasium and drill for
62	Deaf-Mute Department of the University of Deseret.	No	No	No	No	No	No	No	No	No	No	No	No	Five	the boys.
63	Virginia Institution for the Education of the Deaf and Dumb and the Blind.	No	No	No	No	No	No	No	Yes	No	No	No	No	Five	None.
64	Washington School for Defective Youth.	No	No	No	No	No	No	No	No	No	No	No	No	Five	Calisthenics and gymn-
65	West Virginia School for the Deaf and the Blind.	No	No	No	No	No	No	No	Yes	No	No	No	No	Four and a half	stium.
66	Wisconsin School for the Deaf.	No	No	No	No	No	No	No	No	No	No	Yes	No	Five	None.
67	Oral Department of Public Schools, for Instruction of Deaf-Mutes.	No	No	Yes	No	Yes	No	No	No	No	No	No	No	Five and a half	Calisthenics and gymn-
68	Milwaukee Day School for the Deaf.	No	No	Yes	No	Yes	No	No	No	No	No	No	No	Five	stium.
69	St. John's Catholic Deaf-Mute Institute.	No	Yes	Yes	No	No	No	No	Yes	No	No	No	No	Eight	None.

b Combined method is employed, form not specified.

c Advanced class prepares for admission to National Deaf-Mute College.

a The older pupils spend three and one-half hours in school and four in workshops.

TABLE 90.—Statistics of Institutions for the Deaf, etc.—PART III.

Post-office Address.	Name.	Year of First Opening.	Instructors.				Pupils.				
			Male.	Female.	Articulation and Lip-Reading.	Male.	Female.	Kindergarten.	Articulation.	Lip-Reading.	Articular Per-ception.
			23	24	25	26	27	28	29	30	31
1 Talladega, Ala.....	2	1853				40	20	0	16	16	0
2 Little Rock, Ark.....		1857	2	3		56	56	0	23	23	13
3 Berkeley, Cal.....		1860	2	4	1	79	51	0	27	27	
4 Colorado Springs, Colo.....		1874	6	2	2	32	32	0	15	15	0
5 Hartford, Conn.....		1871	6	3	3	62	82	0	70	70	
6 Mystic Bridge, Conn.....		1863	1	3	4	13	12		25	25	
7 Sioux Falls, S. Dak.....		1880	2	2		10	10				
8 Washington, D. C.....		1857	12	2	1	103	34	0	35	35	
9 St. Augustine, Fla.....		1864	7			46	6	0			
10 Caye Spring, Ga.....		1885	1	2	2	13	5	8	11	14	
11 Chicago, Ill.....		1846	4	2		55	31	0	4	4	
12 Chicago, Ill.....		1875	1	4	1	(a32)		0	13	13	
13 Englewood, Ill. (Wabash Avenue, near Sixty-third Street).		1884	0	2	1	19	23	0	23	23	7
14 Jacksonville, Ill.....		1846	9	12	5	302	204		150	150	40
15 Evansville, Ind.....		1886	1	1	0	17	0	0	0	0	0
16 Indianapolis, Ind.....		1844	9	9	1	167	133	0	48	48	
17 Council Bluffs, Iowa.....		1859	7	12		185	138				
18 Olathe, Kans.....		1861	6	10	16	131	104	0	70	70	12
19 Danville, Ky.....		1823	7	5	1	103	91	0	13		
20 Baton Rouge, La.....		1852	8	5		103	91				
21 New Orleans, La.....		1886	1	0		10	0	0	0	0	0
22 Portland, Me.....		1876	1	6	6	25	29	0	54	54	
23 Baltimore, Md. (649 Saratoga Street).		1872	1	3	4	14	9	0	12		
24 Frederick, Md.....		1873	1	3		19	8				
25 Beverly, Mass.....		1863	3	7	2	52	43	15	68	68	6
26 Boston, Mass. (63 Warren Street).		1879	3	2	1	13	9	0	14	14	
27 Northampton, Mass.....		1869	0	8	8	33	48	0	81	81	
28 Flint, Mich.....		1867	0	12	12	46	52	0	98	98	20
29 Michigan School for the Deaf.....		1854	7	10	1	163	137	0	72	72	
30 Norristown, Mich.....		1874	3	3	3	105	69	0	37	36	
31 Faribault, Minn.....		1863	6	4	2	105	1	0	80	80	10

		1854	4	2	2	52	42	0	30	10	6
32	Jackson, Miss	1854	4	2	2	52	42	0	30	10	6
33	Fulton, Mo	1855	6	6	2	144	115	0	64	64	.....
34	St. Louis, Mo. (1849 Cass Avenue)	1852	0	2	1	10	25	0	5	5	.....
35	St. Louis, Mo. (corner Ninth and Washington Streets)	1878	2	1	0	28	16	.....	.....	.....	.....
36	Omaha, Neb	1869	4	4	2	87	63	.....	33	33	15
37	Chambersburg, near Trenton, N. J.	1883	.....	6	2	51	50	0	.....	.....	.....
38	Santa Fe, N. Mex.	1885	1	0	0	3	3	0	.....	.....	.....
39	Buffalo, N. Y. (125 Edward Street)	1861	0	11	10	86	71	19	132	132	11
40	Fordham, N. Y.	1869	1	19	18	(262)	.....	0	171	171	43
41	Malone, N. Y.	1884	4	1	51	23	0	21	21	21	.....
42	New York, N. Y.	1886	0	2	2	7	4	.....	11	11	.....
43	New York, N. Y. (Lexington Avenue, between Sixty-seventh and Sixty-eighth Streets)	1867	4	10	14	112	92	68	204	204	21
44	New York, N. Y. (Washington Heights)	1818	8	9	7	249	128	25	0	344	44
45	Rochester, N. Y. (945 N. St. Paul Street)	1876	1	12	3	92	72	53	164	164	.....
46	Rome, N. Y.	1875	7	4	1	100	70	20	30	30	.....
47	Raleigh, N. C.	1845	5	2	.....	(2106)	.....	0	.....	.....	.....
48	Cincinnati, Ohio	1857	1	1	0	10	9	0	0	0	0
49	Cincinnati, Ohio	1886	2	2	2	4	11	7	15	15	.....
50	Cincinnati, Ohio	1828	13	12	2	250	222	0	100	100	.....
51	Columbus, Ohio	1870	1	1	1	14	13	0	5	5	.....
52	Salem, Oregon	1821	8	26	12	263	224	0	120	120	.....
53	Philadelphia, Pa.	1855	.....	2	2	13	1	.....	14	14	3
54	Philadelphia, Pa. (16 South Broad Street)	1883	.....	2	2	.....	(33)	.....	33	33	3
55	Scranton, Pa.	1876	4	5	1	99	58	0	29	29	0
56	Wilkinsburg, Pa.	1877	.....	5	4	16	21	0	37	37	4
57	Providence, R. I.	1849	1	3	2	(76)	.....	0	21	21	.....
58	Cedar Spring, S. C.	1845	4	3	1	87	64	0	13	13	.....
59	Knoxville, Tenn.	1857	1	0	0	(25)	.....	.....	.....	.....	.....
60	Austin, Tex.	1857	5	5	1	84	57	.....	31	31	.....
61	Austin, Tex.	1884	1	1	1	13	13	0	.....	.....	.....
62	Salt Lake City, Utah	1839	7	3	1	41	43	0	25	25	.....
63	Saulton, Va.	1886	3	1	2	12	8	0	.....	.....	.....
64	Vancouver, Wash.	1870	3	1	1	46	40	0	25	25	0
65	Romney, W. Va.	1882	5	9	3	169	90	.....	48	48	.....
66	Delavan, Wis.	1886	1	1	1	3	3	0	6	6	.....
67	La Crosse, Wis.	1883	.....	6	6	23	19	.....	42	42	.....
68	Milwaukee, Wis. (cor. Prairie and State Streets)	1876	1	1	2	16	12	0	10	10	4
69	St. Francis Station, Wis.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

* From the Report of the Commissioner of Education for 1886-87.

a Number present June 1, 1888.

TABLE 90.—Statistics of Institutions for the Deaf, etc.—PART IV.

Name.	Receipts.			Expenditures.			Number of Volumes in Library.
	Appropriations.	For "Beneficiaries."	Tuition Fees.	Buildings, etc.	Salaries.	Other Purposes.	
2	32	33	34	35	36	37	38
1 Alabama Institution for the Deaf.....		\$13,050	0	\$3,000	\$5,030	\$8,000	1,000
2 Arkansas Deaf-Mute Institute.....	\$9,300	13,000		1,815	8,910	12,685	243
3 Institution for the Deaf and the Blind.....	\$45,750	\$1,353	\$800		\$24,165	\$22,564	1,157
4 Institution for the Education of the Mute and the Blind.....	\$21,000			\$2,500	6,000	12,500	500
5 American Asylum for the Education of the Deaf and Dumb.....							2,000
6 Whipple's Home School.....	3,500						
7 Dakota School for Deaf-Mutes*.....	\$7,500	3,617	2,928		30,913	33,641	5,000
8 Columbia Institute for the Deaf and Dumb { Kendall School.....	45,000			4,500	6,825	8,765	3,500
9 Florida Blind and Deaf-Mute Institute.....	19,500						0
10 Georgia Institution for the Deaf and Dumb.....							1,200
11 Chicago Day Schools for Deaf-Mutes.....					4,000		0
12 Epiphania School.....	100,000			5,184	41,853	54,000	10,000
13 Voice and Hearing School for the Deaf.....	1,800	0	0		1,600	200	
14 Illinois Institution for the Education of the Deaf and Dumb.....	58,000			3,000	27,745	25,079	3,643
15 Evansville Deaf-Mute School.....	58,000			57,002			3,500
16 Indiana Institution for the Education of the Deaf and Dumb.....	41,000			51,500	20,000	22,000	250
17 Iowa Institution for the Education of the Deaf and Dumb.....							1,650
18 Kansas Institution for the Education of Deaf-Mutes.....	29,386			44,614			1,650
19 Kentucky Institution for the Education of Deaf-Mutes.....	1,200	3,780	100		(4,411)		0
20 Louisiana Institution for the Education of the Deaf and Dumb*.....	\$7,000	\$1,520			\$3,933	\$3,917	120
21 New Orleans Public School for Deaf-Mutes.....							
22 Portland School for the Deaf.....	25,000		100		8,353	13,610	2,400
23 Maryland School for the Colored Blind and Deaf-Mutes.....	2,000			1,008	(2,745)		300
24 Mr. Knapp's Institute.....							433
25 Maryland School for the Deaf and Dumb.....							1,403
26 New England Industrial School for Deaf-Mutes.....							3,012
27 Horace Mann School for the Deaf.....				1,193	14,932	13,673	200
28 Clarke Institution for Deaf-Mutes.....				7,000	22,000	26,000	1,195
29 Michigan School for the Deaf.....	52,000	13,450	3,532	223	1,920	1,920	1,550
30 Evangelical Lutheran Deaf-Mute Institution.....		63,291		3,659	15,726	18,621	600
31 Minnesota School for the Deaf.....	38,001	200					
32 Mississippi Institution for the Deaf and Dumb.....	12,625	150			5,175	7,600	

33	Missouri Institution for the Education of the Deaf and Dumb.....	44,177	664,500	70,000	12,000	31,319	1,100
34	Convent of Maria Consilia Deaf-Mute Institute.....						
35	St. Louis Day School for Deaf-Mutes.....						
36	Nbraska Institute for the Deaf and Dumb.....	43,250		10,000			1,100
37	New Jersey School for Deaf-Mutes.....	659			356	549	0
38	New Mexico School for the Deaf and Dumb.....						
39	Le Contoux St. Mary's Institution for the Improved Instruction of Deaf-Mutes.....	70,127	27,015	702	12,574	17,191	640
40	St. Joseph's Institute for Improved Instruction of Deaf-Mutes.....	24,300	18,185	10,018	17,624	43,777	560
41	Northern New York Institution for Deaf-Mutes.....				6957	7,512	0
42	Articulation Class for Deaf-Mutes.....						
43	Institution for the Improved Instruction of Deaf-Mutes.....	46,578	16,451	23,334	17,930	23,253	800
44	New York Institution for the Instruction of the Deaf and Dumb.....	(91,564)	591	9,913	34,877	58,715	4,000
45	Western New York Institution for Deaf-Mutes.....	42,880	71,296	2,362	15,977	26,931	1,200
46	Central New York Institution for Deaf-Mutes.....	28,408	41,150	37,705	19,650	20,130	1,300
47	North Carolina Institution for the Deaf and Dumb and the Blind.....	637,003					1,600
48	Catholic School for the Deaf.....						
49	Cheremund Deaf-Mute Day School.....						
50	Oral School for the Deaf.....				1,900	650	
51	Ohio Institution for the Education of the Deaf and Dumb.....	72,000	400		1,750		
52	Oregon School for Deaf-Mutes.....			9,900	23,321	55,043	2,000
53	Pennsylvania Institution for the Deaf and Dumb.....	6,850		1,600	2,400	3,000	
54	Private School for Teaching Deaf Children to Speak.....	95,000		3,000	45,000	60,400	6,150
55	Pennsylvania Oral School for the Deaf.....						97
56	Western Pennsylvania Institution for the Instruction of the Deaf and Dumb.....						
57	Rhode Island State School for the Deaf.....	23,000	39,000	15,238	12,941	20,770	410
58	South Carolina Institution for the Education of the Deaf and the Blind.....	4,000			2,980	772	300
59	Tennessee School for Deaf and Dumb.....						500
60	School for Colored Deaf-Mutes and Blind.....	21,000		500	(23,500)		600
61	Texas Deaf and Dumb Asylum.....						
62	Deaf-Mute Department of the University of Deseret.....	30,000	5,000	18,000	15,500	12,800	610
63	Virginia Institution for the Education of the Deaf and Dumb and the Blind.....	635,093			1,600		
64	Washington School for Defective Youth.....				5,150	623,000	250
65	West Virginia School for the Deaf and the Blind.....	3,500	3,800				
66	Wisconsin School for the Deaf.....	25,800	0	0	8,730	14,420	767
67	Oral Department of Public Schools, for Instruction of Deaf-Mutes.....	40,000	343	1,326	14,682	23,743	1,200
68	Milwaukee Day School for the Deaf.....			5,000	850		
69	St. John's Catholic Deaf-Mute Institute.....				3,750	700	0

* From the Report of the Commissioner of Education for 1886-87.

a Includes department for the blind.

b Includes \$105 from farm products sold; \$225 from individuals, as legacies, and \$1,815 from congregations.

c From insurance companies on account of fire.

d Includes "Donations," \$81; cash on hand Oct. 1, 1887, \$266, and a loan of \$650.

e Includes cash on hand Oct. 1, 1888.

f Other sources.

g Subscription.

EDUCATION OF THE BLIND.

GENERAL REMARKS.

New institutions.—The dual Institution for Colored Deaf-Mutes and Blind at Austin, Tex., began its work in the fall of 1887. Its management is wholly independent of the older institution, also located at Austin. Mr. W. H. Holland is superintendent. Building accommodations on the "cottage plan" are provided for fifty pupils, and a hundred acres of rich land are the property of the school.

A legacy of \$25,000 was left for the establishment of an institution for the blind in western Pennsylvania, provided that an equal sum for the same purpose be subscribed by citizens. This amount has been raised, and owing to rapid increase in value of the property representing the original legacy the sum of \$75,000 is now at the disposal of the gentlemen in charge of the funds. It is proposed to locate the school within easy reach of Pittsburg.

No report has been received from the Wyoming institution, which was prepared to begin work in October, 1887.

Systems.—Mr. Battles, of the Pennsylvania institution, in his report for 1887, says: "A year or more ago we commenced a series of careful, exhaustive, and unprejudiced tests relative to the comparative tangibility of line and point letters. The pupils were taken individually and their speed per minute recorded. In the first test, which was entirely in line, a large number, in fact about 25 per cent. were found unable to read at all, and of the others many read very slowly and with great difficulty.

"Six months later another trial was made; in the mean time those unable to read had been placed in New York point; at this time all could read with more or less fluency either in line or point.

"The fact is the line letter has been over-developed; its very advantage of compactness having been gained at the expense of its tangibility, until now it can be taught only to the young, and even those who have learned it lose the power of distinguishing the letters when they follow any industrial pursuit. On the contrary, we have found no one unable to distinguish the point letters, and generally after but little instruction. In addition to which the ability to *write* as well as *read* a system places the blind more in equality with the sighted; their slates and stylus acting the part of pen or pencil, enabling them to take notes, point their lessons, and incidentally aiding materially in an objective method of improving their spelling, in which they are commonly deficient.

"This, in addition to the fact that but 9 per cent. are of educable age, leads us to the conclusion that it would be wisest to confine the literature of the blind entirely to point."

Mr. Rainey, of the Texas Institution for the Blind, advocates the establishment in each State of a working home and retreat for the blind of both sexes, where the intelligent could work for wages and those unable to help themselves could be properly cared for.

At the ninth biennial meeting of instructors of the blind a committee of thirty-three was appointed to push forward the matter of establishing a college for the higher education of this class. The tenth biennial meeting was held at the Maryland institution during the past summer, but the proceedings are not yet published and we are uninformed as to the results of the efforts of this committee.

NOTES FROM CATALOGUES AND RETURNS.

CALIFORNIA.

Institution for the Deaf and Dumb and the Blind, Berkeley, Cal.—The course of instruction in this institution is carried somewhat beyond the grammar grade of public schools. The New York point and Howe's Boston raised print are used. Twenty of the thirty-one pupils receive instruction in vocal and instrumental music three hours daily. No provision for industrial training for the blind is at present made.

ILLINOIS.

Illinois Institution for the Education of the Blind, Jacksonville, Ill.—The Wait point system has been adopted in school work and musical notations. Stenography and type-writing are to be taught, and drill work has been introduced and is conducted by an expert drill master.

MARYLAND.

Maryland School for the Blind, Baltimore, Md.—This institution is controlled by a board of directors, eighteen in number, elected annually. It is designed for the education of blind persons between the ages of seven and eighteen years, and those who are only partially blind are also received. The course of instruction is continued somewhat beyond the grammar grade of the public schools. Point and line systems are in use.

Pupils are trained in tuning, chair-caning, broom and mattress making, etc. The establishment of a kindergarten is recommended, and the superintendent in his printed report calls special attention to the need of a gymnasium.

OHIO.

Ohio Institution for the Education of the Blind, Columbus, Ohio.—This institution completed its fiftieth year of existence in July, 1887. Five pupils were present at its opening, a number which had increased to two hundred and fifty on June 1, 1888. The course in the literary department includes kindergarten work and the regular high school course of studies. Vocal and instrumental music are taught, and considerable attention is given to instruction in tuning. Up to November 15, 1887, nine young men had been graduated as "tuners;" of these, five are reported as doing a "fine business," and two are engaged in the sale of musical instruments, and find their knowledge of tuning a great help to them. Instruction is also given in broom-making, chair-caning, etc.

OREGON.

Oregon Institute for the Blind, Salem, Oregon.—Hitherto there has been no provision for industrial training in this school, but during the past year a beginning was made, by the introduction of broom-making, and the superintendent hopes to enlarge this department in the future, as means become available.

PENNSYLVANIA.

Pennsylvania Institution for the Instruction of the Blind, Philadelphia, Pa.—An act was passed by the last State Legislature, extending to twelve years the time during which pupils may be maintained at this institution at State expense. Heretofore no pupil has been received under ten years of age, but the recent law makes the length of residence practically unrestricted, and children are now admitted at five years of age. The principal, in his report for 1887 to the board of managers, calls attention to the overcrowded condition of the school-rooms and dormitories, making it impossible to separate properly the sexes and pupils of different ages.

VIRGINIA.

Virginia Institution for the Education of the Deaf and Dumb and of the Blind, Staunton, Va.—The board of directors constituting the controlling body, formerly seven in number, now consists of nine members. Three were appointed for one year, three for two years, and three for three years, thus constituting a continuing board, of which three are appointed each year for a period of three years. The principal expresses the opinion that this change "will be found advantageous in giving more of a settled character to the policy of the institution."

TABLE 91.—*Summary of Statistics of Institutions for the Blind for 1887-88.*

State.	Number of Institutions.	Instructors.				Pupils.					Receipts.	Expenditures.	Number of Volumes in Library.		
		Male.	Female.	Total.	Music.	Total.	In Vocal Culture.	In Instrumental Music.	In Tuning.						
North Atlantic Division:															
Massachusetts	1	9	11	20	12	114	95	209	109	113	15	\$51,875	\$56,919	9,248	
New York	2	6	21	27	13	{ 211 74	{ 66 66	{ 351 225	197	212	65	151,464	146,771	3,050	
Pennsylvania	1	10	13	23	10	125	99	225	108	92	25	152,858	152,858	4,500	
Total	4	25	45	70	35	{ 314 (211)	{ 260 66	{ 785 225	414	417	105	356,197	356,518	16,798	
South Atlantic Division:															
Maryland	2	4	4	8	4	49	51	100	54	50	8	33,305	31,928	1,432	
Virginia	1	5	3	8	3	32	22	54	36	45	4	35,123	38,970	200	
West Virginia	1	2	2	4	2	23	13	36	15	25	0	25,800	17,070	250	
North Carolina	1	2	6	10	4	44	40	84	30	30	5	37,000	.....	200
South Carolina	1	3	1	4	1	(20)	20	20	15	16	6	.....	.....	.....
Georgia	1	5	3	8	0	55	40	95	.....	0	0	21,837	13,575	1,200
Florida	1	1	0	1	0	1	5	6	0	0	0	5,000	.....	0
Total	8	24	19	43	14	{ 204 (20)	{ 171 66	{ 395 225	126	105	23	157,065	101,513	3,282	
South Central Division:															
Kentucky	1	4	6	10	2	48	32	80	80	48	.....	23,766	27,004	1,700
Tennessee	1	1	6	7	1	38	37	75	60	50	6	17,500	16,000	500	
Alabama	1	2	1	3	1	20	14	34	25	20	.....	7,820	28,180	700
Mississippi	1	0	3	3	1	20	14	34	23	19	.....	.....	10,756	700
Louisiana	1	2	4	6	.....	11	7	18	.....	.....	.....	6,000	6,000	400
Texas	2	4	6	10	4	{ 65 (10)	{ 56 66	{ 131 181	10	53	8	35,160	63,500	2,514	
Arkansas	1	4	6	10	2	40	44	84	60	30	12	13,548	18,699	.....
Total	8	17	32	49	11	{ 242 (10)	{ 204 66	{ 456 225	258	220	26	108,794	170,139	6,514	

North Central Division:

Ohio.....	1	6	10	16	9	(250)	250	40	153	223	73,084	57,584	3,600
Indiana.....	1	13	18	31	4	67	65	40	100	8	29,261	25,889	1,000
Illinois.....	1	3	6	9	4	74	74	8	43	10	33,723	42,879	1,865
Michigan.....	1	3	5	8	2	51	35	54	65	1	27,800	20,494	1,562
Wisconsin.....	1	2	4	6	3	48	42	50	46	1	20,000	20,000	2,300
Minnesota.....	1	2	4	6	3	26	24	59	48	1	12,000	13,056	2,800
Iowa.....	1	3	6	10	3	73	83	107	100	8	36,240	30,000	2,000
Missouri.....	1	3	4	7	3	43	43	92	13	9	23,000	23,000	2,000
Nebraska.....	1	1	4	5	2	14	24	38	6	31	50,500	50,500	710
Kansas.....	1	0	7	7	2	52	35	57	54	3	18,167	35,834	900
Total.....	10	36	69	105	31	{ 478 } (250)	426	{ 1,154 }	361	631	324,771	319,236	16,767
Western Division:													
Colorado.....	1	0	3	3	1	14	10	24	18	0	21,000	22,000	200
Oregon.....	1	1	2	3	1	5	10	15	1	9	6,000	6,300	330
California.....	1	2	1	3	1	15	16	31	20	20	47,103	46,729	270
Total.....	3	3	6	9	3	34	36	70	45	47	74,103	75,029	800
SUMMARY.													
North Atlantic Division.....	4	25	45	70	35	{ 314 } (211)	260	{ 785 }	414	417	356,197	356,548	16,798
South Atlantic Division.....	8	24	19	43	14	{ 204 } (20)	171	{ 395 }	126	223	157,066	101,543	3,282
South Central Division.....	8	17	32	49	11	{ 242 } (10)	204	{ 456 }	258	220	108,794	170,139	6,514
North Central Division.....	10	36	69	105	31	{ 478 } (250)	426	{ 1,154 }	361	631	324,771	319,236	16,767
Western Division.....	3	3	6	9	3	{ 34 } (491)	36	{ 70 }	45	47	74,103	75,029	800
Total for 1887-88.....	33	105	171	276	94	{ 1,272 } (491)	1,097	{ 2,860 }	1,204	1,531	1,020,031	1,022,405	44,161
Total for 1886-87.....	32			2587				{ 2,697 }			902,126	777,812	
Increase.....	1							{ 163 }			118,805	244,683	

a This includes "other employees."

TABLE 92.—*Statistics of Institutions for the Blind for 1887-88; from Replies to Inquiries by the United States Bureau of Education.*—PART I.

P. O. Address.	Name.	Year of First Opening.	Controlling Body.			Executive.		
			Name.	No.	Term.	By Whom Appointed.	Name.	Title.
1	2	3	4	5	6	7	8	9
1 Talladega, Ala.....	The Alabama Academy for the Blind.	1866	Board of commissioners.	8	6 years...	Governor.....	J. H. Johnson	Principal.....
2 Little Rock, Ark..	Arkansas School for the Blind.	1859	Board of trustees..	5	2 years...	Governor, confirmed by Senate.	John H. Dye	Superintendent ..
3 Berkeley, Cal.....	Institution for the Deaf and Dumb and the Blind.	1860	Board of directors.	5	4 years...	Governor.....	W. Wilkinson	Principal.....
4 Colorado Springs, Colo.	Institution for the Education of the Mute and the Blind.	1874	Board of trustees..	5	6 years...	Governor, and confirmed by the Senate.	John E. Ray, M. A.	Superintendent ..
5 St. Augustine, Fla.	Florida Blind and Deaf-Mute Institute.	1835	Board of managers..	4	4 years...	Elected by the people.	Park Terrell.....	Principal.....
6 Macon, Ga.....	Georgia Academy for the Blind.*	1852	.....	.....	.....	.....	W. D. Williams.....	.....
7 Jacksonville, Ill...	Illinois Institution for the Education of the Blind.	1849	Board of trustees..	3	6 years...	Governor, approved by the Senate.	W. S. Phillips.....	Superintendent ..
8 Indianapolis, Ind.	Indiana Institution for the Education of the Blind.*	1847	.....	.....	.....	.....	H. B. Jacobs.....	.....
9 Vinton, Iowa.....	Iowa College for the Blind...	1853	Trustees.....	6	2 years...	Legislature.....	T. F. McCune.....	Principal.....
10 Kansas City, Kans.	Kansas Institution for the Education of the Blind.	1867	Board of trustees..	5	3 years...	Governor.....	Geo. H. Miller.....	Superintendent ..
11 Louisville, Ky.....	Kentucky Institution for the Education of the Blind.	1842	Board of visitors..	9	4 years...	Governor.....	Benj. B. Huntton, M. A.	Superintendent ..
12 Baton Rouge, La..	Louisiana Institution for the Blind and Industrial Home for the Blind.*	1871	.....	.....	.....	.....	Mary Stratton Lane.	.....
13 Baltimore, Md.....	Maryland School for the Blind.	1853	Board of directors.	18	1 year....	Elected by corporations.	Frederick D. Morrison.	Superintendent ..
14 Baltimore, Md.....	Maryland School for the Colored Blind and Deaf-Mutes.	1872	Board of trustees..	6	1 year....	(a)	Frederick D. Morrison.	Superintendent ..

15	Boston, Mass.....	Perkins Institution and Massachusetts School for the Blind.	1832	Board of trustees..	12	1 year.....	Governor and corporation.	M. Anagnos.....	Director.....	Board of trustees.
16	Lansing, Mich.....	Michigan School for the Blind.	1881	Board of control...	3	6 years.....	Governor, confirmed by Senate.	Geo. Barnes.....	Superintendent...	Board of control.
17	Faribault, Minn....	Minnesota School for the Blind.	1866	Board of directors..	7	5 years.....	Governor.....	J. J. Dow.....	Superintendent...	Board of trustees.
18	Jackson, Miss.....	Mississippi Institution for the Education of the Blind.	1849	Board of trustees..	5	4 years.....	Governor.....	M. M. Langley.....	Superintendent...	Board of trustees.
19	St. Louis, Mo. (1827 Morgan St.)	Missouri School for the Blind.	1851	Board of trustees..	9	4 years.....	Governor.....	Jno. T. Sibley.....	Superintendent...	Board of trustees.
20	Nebraska City, Nebr.	Nebraska Institute for the Blind.	1875	Board of public lands and buildings.	4	2 years...	State electors.	J. B. Parmelee.....	Principal.....	Governor.
21	Batavia, N. Y.....	New York State Institution for the Blind.	1868	Board of trustees..	9	6 years.....	Governor.....	Arthur G. Clement...	Superintendent...	Board of trustees.
22	New York, N. Y...	New York Institution for the Blind.	1831	Board of managers.	20	1 year.....	Self-perpetuating.	Wm. B. Wait.....	Superintendent...	Board of managers.
23	Raleigh, N. C.....	North Carolina Institution for Deaf and Dumb and the Blind.	1853	Board of trustees..	7	6 years.....	Governor.....	W. J. Young.....	Principal.....	Board of trustees.
24	Columbus, Ohio...	Ohio Institution for the Education of the Blind.	1837	Board of trustees..	5	5 years.....	Governor, confirmed by the Senate.	C. H. Miller.....	Superintendent...	Board of trustees.
25	Salem, Oregon.....	Oregon Institute for the Blind.	1873	Board of education.	3	4 years.....	Elected.....	Rev. D. B. Gray.....	Superintendent...	Board of education.
26	Philadelphia, Pa...	Pennsylvania Institution for the Instruction of the Blind.	1833	Board of managers.	24	Life.....	Self-perpetuating.	Frank Battles.....	Principal.....	Board of managers.
27	Cedar Spring, S. C.	South Carolina Institution for the Education of the Deaf and Dumb and the Blind.	1849	Board of commissioners.	5	Indefinite.	Governor.....	Newton F. Walker...	Superintendent...	Board of commissioners.
28	Nashville, Tenn...	Tennessee School for the Blind.	1844	Board of trustees..	7	Life.....	Legislature.....	S. A. Link.....	Superintendent...	Board of trustees.
29	Austin, Tex.....	School for Colored Deaf Mutes and Blind.	1837	.....	.....	.....	.....	W. H. Holland.....	Superintendent...	.....
30	Austin, Tex.....	Texas Institution for the Blind.	1838	Board of trustees..	5	2 years.....	Governor.....	Frank Rainey.....	Superintendent...	Board of trustees.
31	Staunton, Va.....	Virginia Institution for the Deaf and Dumb and the Blind.	1839	Board of directors.	9	3 years...	Governor.....	Thomas S. Doyle.....	Principal.....	Board of directors.
32	Romney, W. Va....	West Virginia School for the Deaf and the Blind.	1870	Board of regents..	7	4 years.....	Governor.....	C. H. Hill.....	Principal.....	Board of regents.
33	Janescville, Wis...	Wisconsin School for the Blind.	1850	Board of supervision.	5	5 years...	Governor, confirmed by Senate.	Mrs. Sarah F. C. Little, M. A.	Superintendent...	Board of supervision.

* From Report of the Commissioner of Education for 1886-87.

α Presidents of Maryland School for Blind and Maryland School for Deaf.

TABLE 92.—Statistics of Institutions for the Blind, etc.—PART II.

Name.	Instruction is Given—							Number of Hours of Instruction in Music.	Physical Training.
	By Kindergarten.	In Academies.	By Line System.	By Point System.	By Braille System.	In Vocal Culture.	In Instrumental Music.	In Tuning.	
2	11	12	13	14	15	16	17	18	20
1 The Alabama Academy for the Blind.....	No....	Yes....	Yes....	Yes....	Yes....	Yes....	Yes....	Six.....	None.
2 Arkansas School for the Blind.....	Yes....	Yes....	Yes....	Yes....	No....	Yes....	Yes....	Eight.....	Gymnastics.
3 Institution for the Deaf and Dumb and the Blind.....	No....	Yes....	Yes....	Yes....	No....	Yes....	Yes....	Three.....	Gymnasium.
4 Institution for the Education of the Mute and the Blind.....	No....	No....	Yes....	Yes....	No....	Yes....	Yes....	Nine.....	Calisthenics.
5 Florida Blind and Deaf-Mute Institute.....	No....	No....	Yes....	No....	No....	No....	No....	None.....	None.
6 Georgia Academy for the Blind.....	Yes....	Yes....	Yes....	Yes....	No....	Yes....	Yes....	Six.....	Military drill and calisthenics.
7 Illinois Institution for the Education of the Blind.....	Yes....	Yes....	Yes....	Yes....	No....	Yes....	Yes....	Five.....	Gymnastics and military drill.
8 Indiana Institution for the Education of the Blind.....	No....	No....	No....	Yes....	No....	Yes....	Yes....	Twelve.....	Gymnastics.
9 Iowa College for the Blind.....	Yes....	Yes....	No....	Yes....	No....	Yes....	Yes....	Three.....	Calisthenics.
10 Kansas Institution for the Education of the Blind.....	No....	Yes....	No....	Yes....	No....	Yes....	Yes....	Five.....	Gymnasium.
11 Kentucky Institution for the Education of the Blind.....	Yes....	Yes....	No....	Yes....	No....	Yes....	Yes....	Eight.....	Calisthenics and gymnastics.
12 Louisiana Institution for the Blind and Industrial Home for the Blind.....	No....	Yes....	Yes....	Yes....	No....	Yes....	Yes....	Eight.....	Calisthenics.
13 Maryland School for the Blind.....	No....	Yes....	Yes....	Yes....	No....	Yes....	Yes....	Eight.....	Gymnastics and military drill.
14 Maryland School for the Colored Blind and Deaf-Mutes.....	No....	No....	Yes....	Yes....	No....	Yes....	Yes....	Nine.....	Gymnastics.
15 Perkins Institution and Massachusetts School for the Blind.....	Yes....	Yes....	Yes....	No....	Yes....	Yes....	Yes....	Six.....	Gymnastics.
16 Michigan School for the Blind.....	Yes....	Yes....	Yes....	Yes....	No....	Yes....	Yes....	One and a half.....	Gymnasium.
17 Minnesota School for the Blind.....	Yes....	Yes....	Yes....	Yes....	Yes....	Yes....	Yes....	Eight.....	Gymnastics.
18 Mississippi Institution for the Education of the Blind.....	No....	Yes....	Yes....	Yes....	No....	Yes....	Yes....	Eight.....	Calisthenics and gymnastics.
19 Missouri School for the Blind.....	Yes....	Yes....	Yes....	No....	Yes....	Yes....	Yes....	Eight.....	Calisthenics.
20 Nebraska Institute for the Blind.....	No....	Yes....	Yes....	Yes....	No....	Yes....	Yes....	Five.....	Calisthenics.
21 New York State Institution for the Blind.....	Yes....	Yes....	Yes....	Yes....	No....	Yes....	Yes....	Eight.....	None.
22 New York Institution for the Blind.....	Yes....	Yes....	No....	Yes....	No....	Yes....	Yes....	Six.....	Gymnastics and military drill.
23 North Carolina Institution for Deaf and Dumb and the Blind.....	No....	Yes....	Yes....	Yes....	No....	Yes....	Yes....	Nine.....	Gymnastics.
24 Ohio Institution for the Education of the Blind.....	Yes....	Yes....	Yes....	Yes....	No....	Yes....	Yes....	Six.....	Gymnastics.
25 Oregon Institute for the Blind.....	No....	No....	Yes....	Yes....	No....	Yes....	Yes....	Six.....	Gymnastics.

26	Pennsylvania Institution for the Instruction of the Blind	Yes....	Yes....	Yes....	Yes....	Yes....	Gymnasium, calisthenics, and military drill.
27	South Carolina Institution for the Education of the Deaf and Dumb and the Blind	No....	Yes....	Yes....	Yes....	Three....	Calisthenics.
28	Texas School for the Blind	No....	Yes....	Yes....	Yes....	One to two....	
29	School for Colored Deaf-Mutes and Blind	No....	Yes....	Yes....	Yes....	Six....	Calisthenics.
30	Texas Institution for the Blind	Yes....	Yes....	Yes....	Yes....	Seven....	Calisthenics and drill.
31	Virginia Institution for the Deaf and Dumb and the Blind	No....	Yes....	Yes....	Yes....	Five....	None.
32	West Virginia School for the Deaf and the Blind....	No....	Yes....	Yes....	Yes....	Eight....	Gymnasium.
33	Wisconsin School for the Blind.....	Yes....	Yes....	Yes....	Yes....		

TABLE 92.—Statistics of Institutions for the Blind, etc.—PART III.

Post-Office Address.	Name.	Year of First Opening.	Instructors.		Pupils.						
			Male.	Female.	Music.	Male.	Female.	In Kindergarten.	In Vocal Culture.	In Instrumental Music.	In Tuning.
1	2	3	4	5	6	7	8	9	10	11	12
Talladega, Ala.....	The Alabama Academy for the Blind.....	1866	2	1	1	20	14	0	25	20	.....
Little Rock, Ark.....	Arkansas School for the Blind.....	1859	4	6	2	40	44	14	60	30	12
Berkeley, Cal.....	Institution for the Deaf and Dumb and the Blind.....	1860	2	1	1	15	16	0	20	20	.....
Colorado Springs, Colo.....	Institution for the Education of the Mute and the Blind.....	1874	0	3	1	14	10	0	24	18	0
St. Augustine, Fla.....	Florida Blind and Deaf-Mute Institute.....	1885	1	0	0	1	5	0	0	0	0
Macon, Ga.....	Georgia Academy for the Blind*.....	1852	5	3	4	55	40	.....	.....	.....	.....
Jacksonville, Ill.....	Illinois Institution for the Education of the Blind.....	1849	3	6	4	97	74	.....	40	100	8
Indianapolis, Ind.....	Indiana Institution for the Education of the Blind*.....	1847	13	18	3	67	65	.....	.....	.....	.....
Vinton, Iowa.....	Iowa College for the Blind.....	1853	4	6	3	74	83	30	100	125	8
Kansas City, Kans.....	Kansas Institution for the Education of the Blind.....	1867	0	7	2	52	35	0	54	54	3
Louisville, Ky.....	Kentucky Institution for the Education of the Blind.....	1842	4	6	2	48	32	25	80	48	.....
Baton Rouge, La.....	Louisiana Institution for the Blind and Industrial Home for the Blind.*.....	1871	2	4	1	11	7	.....	.....	.....	.....
Baltimore, Md.....	Maryland School for the Blind.....	1853	2	4	3	38	42	.....	39	40	8
Baltimore, Md.....	Maryland School for the Colored Blind and Deaf-Mutes.....	1872	2	.....	1	11	9	0	15	10	.....
Boston, Mass.....	Perkins Institution and Massachusetts School for the Blind.....	1832	9	11	12	114	95	27	109	113	15
Lansing, Mich.....	Melikan School for the Blind.....	1881	3	5	3	51	36	20	8	43	10
Faribault, Minn.....	Minnesota School for the Blind.....	1866	2	4	3	26	24	12	46	48	1
Jackson, Miss.....	Mississippi Institution for the Education of the Blind.....	1849	0	3	1	20	14	0	23	19	.....
St. Louis, Mo. (1827 Morgan street)	Missouri School for the Blind.....	1851	3	4	3	49	43	15	13	62	9
Nebraska City, Nebr.....	Nebraska Institute for the Blind.....	1875	1	4	2	14	24	0	6	31	0
Albany, N. Y.....	New York State Institution for the Blind.....	1868	3	8	6	74	66	.....	40	80	11
New York, N. Y.....	New York Institution for the Blind.....	1831	3	13	7	(221)	50	50	157	122	54
Raleigh, N. C.....	North Carolina Institution for the Deaf and Dumb and the Blind.....	1853	4	10	9	44	40	0	6	30	5
Columbus, Ohio.....	Ohio Institution for the Education of the Blind.....	1837	6	9	4	10	9	23	40	153	23
Salem, Oregon.....	Oregon Institute for the Blind.....	1873	1	2	1	5	10	0	1	9	.....
Philadelphia, Pa.....	Pennsylvania Institution for the Instruction of the Blind.....	1833	10	13	10	126	99	41	108	92	25
Cedar Spring, S. C.....	South Carolina Institution for the Education of the Deaf and Dumb and the Blind.....	1849	3	1	1	(92b)	0	0	13	16	6
Nashville, Tenn.....	Tennessee School for the Blind.....	1844	1	6	1	38	37	0	60	50	6
Austin, Tex.....	School for Colored Deaf-Mutes and Blind.....	1887	1	.....	.....	.....	.....	.....	.....	.....	.....
Austin, Tex.....	Texas Institution for the Blind.....	1858	3	6	3	65	56	20	10	53	8
Staunton, Va.....	Virginia Institution for the Deaf and Dumb and the Blind.....	1839	5	3	3	32	22	0	36	45	0
Romney, W. Va.....	West Virginia School for the Deaf and the Blind.....	1870	2	2	2	23	13	0	15	25	0
Janesville, Wis.....	Wisconsin School for the Blind.....	1850	1	5	2	48	42	20	54	65	33

* From the Report of the Commissioner of Education for 1886-87.

a Number present September 30, 1887.

b Number present June 1, 1888.

TABLE 92. — *Statistics of Institutions for the Blind, etc.* — PART IV.

	Name.	Receipts.			Expenditures.			Number of Vol- umes In Library.
		Appropriations.	For "Beneficent- charities."	Tuition Fees.	Buildings, etc.	Salaries.	Other Pur- poses.	
2		31	32	33	34	35	36	37
1	The Alabama Academy for the Blind.....		\$7,820		\$20,000	\$2,450	\$5,730	700
2	Arkansas School for the Blind.....	\$1,062	12,486		884	6,500	11,345	
3	Institution for the Deaf and Dumb and the Blind.....	a 45,750	a 61,352	0		a 24,165	a 22,564	270
4	Institution for the Education of the Mute and the Blind.....	21,000			a 2,500	2,600	16,900	270
5	Florida Blind and Deaf-Mute Institute.....	a 5,000						0
6	Georgia Academy for the Blind*.....		(20,837)			(13,575)		1,200
7	Illinois Institution for the Education of the Blind.....	32,000	1,723		7,695	9,516	25,668	1,895
8	Indiana Institution for the Education of the Blind*.....		(29,261)			(25,889)		1,000
9	Iowa College for the Blind.....	33,000		3,240		10,000	20,000	2,800
10	Kansas Institution for the Education of the Blind.....	18,167			17,667	8,267	9,900	900
11	Kentucky Institution for the Blind and Industrial Home for the Blind*.....	28,766			1,551	5,792	19,661	1,700
12	Louisiana Institution for the Blind.....		(6,000)			(6,000)		400
13	Maryland School for the Blind.....	20,195	64,104	487	3,525	7,800	13,033	1,202
14	Maryland School for the Colored Blind and Deaf-Mutes.....	7,000	1,520			3,593	3,917	230
15	Perkins Institution and Massachusetts School for the Blind.....	30,000	21,875	0	3,460	19,420	34,039	9,248
16	Michigan School for the Blind.....	27,800				7,340	13,154	1,562
17	Minnesota School for the Blind.....	12,906			894	5,634	6,528	
18	Mississippi Institution for the Education of the Blind.....				8,000	2,755		700
19	Missouri School for the Blind.....	23,000			3,000	8,000	12,000	2,000
20	Nebraska Institute for the Blind.....	50,500			42,000	4,200	4,300	710
21	New York State Institution for the Blind.....	43,114	4,006		11,508	19,174	21,851	
22	New York Institution for the Blind.....	79,440						
23	North Carolina Institution for Deaf and Dumb and the Blind.....	a 37,000		d 24,904	3,908	25,052	65,275	3,650
24	Ohio Institution for the Education of the Blind.....	73,084			1,500	12,000	44,084	3,600
25	Oregon Institute for the Blind.....	6,000			2,300	2,400	1,600	330
26	Pennsylvania Institution for the Instruction of the Blind.....	e 18,198	48,000	d 86,680	8,104	23,156	121,598	4,500
27	South Carolina Institution for the Education of the Deaf and Dumb and the Blind.....							500
28	Tennessee School for the Blind.....	17,500				4,400	11,600	
29	School for Colored Deaf Mutes and Blind.....							
30	Texas Institution for the Blind.....	35,160			28,500	15,000	20,000	2,514
31	Virginia Institution for the Deaf and Dumb and the Blind.....	a 35,000		123	a 35,000	3,970		200
32	West Virginia School for the Deaf and the Blind.....	25,800	0	0	0	2,650	14,420	250
33	Wisconsin School for the Blind.....	20,000			200	7,600	12,200	2,300

* From the Report of the Commissioner of Education for 1886-87.

a Includes department for the deaf.

b From miscellaneous sources.

c Includes receipts from shops, etc.

d All other sources, including legacies.

e Income from investments.

EDUCATION OF THE FEEBLE-MINDED.

GENERAL REMARKS.

A private school, opened at Millville, N. J., in September, 1887, was on March 1, 1888, removed to Vineland, and is now known as "The New Jersey Home for the Education and Care of Feeble-minded Children." It is controlled by a board of directors, with Rev. S. O. Garrison as superintendent. The institution has the cottage system.

Mainly through the efforts of Mr. Garrison, a law was enacted by the Legislature of New Jersey in March, 1888, providing for the establishment of a "home for the care and training of feeble-minded women." Vineland was selected for its location, and Mr. Garrison appointed superintendent. It is now open for the reception of patients, and is similar in character to the institution at Newark, N. Y.

A school was in April last organized in the "Brunswick Home," at Amityville, N. Y. This "home" is for the reception of "idiotic, epileptic, paralytic, nervous, and feeble-minded persons of both sexes," and patients are received who have been rejected by all other institutions. It is constructed on the cottage plan. The school is designed for the instruction of those patients who possess sufficient capacity to learn. Special attention is given to instruction in singing, and the drawing class is free to all.

Mrs. E. M. Seguin, widow of the late Dr. E. C. Seguin, has successfully carried on in New York, a private school for the feeble-minded, which was established by Dr. Seguin in 1878. It appears this year for the first time, in our Reports.

A new building is now in course of construction at the Nebraska Institution, which will increase the capacity of that institution to one hundred and thirty. Seventy-three were present on June 1, 1888. It is hoped that the next State Legislature will make appropriation for an industrial department.

The Kansas State Asylum for Idiotic and Feeble-minded Youth was transferred in March, 1887, from Lawrence to Winfield. "The board of trustees have resolved to enlarge the scope of the institution, and render it an asylum in fact as well as a school, making provision for the cases of profound idiocy."

Dr. A. C. Rogers, the superintendent of the Minnesota school for feeble-minded, at Faribault, says: "We have developed what we know as the 'coördinate' system of training * * * viz: The 'dovetailing' of school-room and manual training occupations. We think that the pupils do *better* in the school-rooms under this system, besides developing decided ability for industrial pursuits."

TABLE 93.—*Summary of Statistics of Institutions for the Feeble-Minded for 1887-88.*

State.	Number of Institutions.	Number Having Col- lage System.	Instructors.				Pupils.				Receipts.	Expendi- tures.	
			Male.		Female.		Total.	Kindergarten.	Music.				
			Male.	Female.	Male.	Female.							
North Atlantic Division:													
Massachusetts	4	1	2	14	16	{	(8)	103	247	34	21	\$93,776	\$42,003
Connecticut.....	1	0	.....	3	3	{	(127)	.....	127	31	38	.....	.....
New York.....	4	2	2	16	18	{	(27)	441	724	24	21	167,840	193,333
New Jersey.....	1	1	.....	2	2	{	256	.....	30	20	3	3,564	.....
Pennsylvania.....	1	.....	11	11	11	{	19	(654)	654	51	.....	115,967	119,137
Total.....	11	4	4	46	50	{	(816)	555	1,752	160	83	326,117	351,473
South Atlantic Division:													
Maryland.....	1	1	1	2	3			(10)	10	6	.....	5,000	4,100
Total.....	1	1	1	2	3			(10)	10	6	.....	5,000	4,100
South Central Division:													
Kentucky	1	0	.....	5	5			(106)	166	40	.....	33,500	33,200
Total.....	1	0	.....	5	5			(166)	166	40	.....	33,500	33,200
North Central Division:													
Ohio.....	1	0	.....	21	21			509	854	.....	212	203,214	133,926
Indiana.....	1	1	0	7	7			122	240	32	.....	28,360	28,360
Illinois.....	1	0	1	9	10			224	185	409	35	72,000	72,000
Michigan.....	1	1	.....	2	2			30	9	39	29	.....	.....
Minnesota.....	1	0	.....	4	4			117	75	192	22	95,078	63,219
Iowa.....	1	1	1	11	12			(370)	370	18	.....	62,000	62,000
Nebraska.....	1	.....	.....	3	3			43	38	81	18	38,000	36,505
Kansas.....	1	0	.....	2	2			65	50	.....	.....	18,000	83,755
Total.....	8	4	2	59	61	{	(370)	790	2,271	151	294	516,632	479,855

TABLE 93.—*Summary of Statistics of Institutions for the Feeble-Minded for 1887-88—Continued.*

State.	Number of Institutions.	Number Having College System.	Instructors.		Pupils.				Receipts.	Expenditures.		
			Male.	Female.	Male.	Female.	Total.	Kindergarten.			Misc.	
Western Division : California.....	1	0	1	2	3	(92)	92	12	\$44,988	\$43,001		
Total.....	1	0	1	2	3	(92)	92	12	44,988	43,001		
SUMMARY.												
North Atlantic Division.....	11	4	4	46	50	{ 316 411	555	{ 1,782 10	160	83	326,117	354,473
South Atlantic Division.....	1	1	1	2	3	{ 10 166	5	{ 10 166	6	40	5,000	4,100
South Central Division.....	1	0	.....	5	5	{ 370 1,111	790	{ 2,271 92	151	294	33,500	33,290
North Central Division.....	8	4	2	59	61	{ 370 1,111	790	{ 2,271 92	151	294	516,652	479,855
Western Division.	1	0	1	2	3	(92)	92	12	44,988	43,001	43,001	43,001
Total for 1887-88.....	22	9	8	114	122	{ 1,454 1,522	345	{ 4,321 3,639	357	389	926,257	914,629
Total for 1886-87.....	19	.....	.....	.....	(a)	.....	.....	.....	747,640	710,112	710,112	710,112
Increase.....	3	.....	.....	.....	(a)	.....	.....	632	178,617	204,517	204,517	204,517

^a "Other employes" are included and no comparison can be made.

TABLE 94.—Statistics of Institutions for the Feeble-Minded for 1887-88; from Replies to Inquiries by the United States Bureau of Education.—PART I.

Post-Office Address.	Name.	Year of First Opening.	Controlling Body.			
			Name.	No.	Term.	By Whom Appointed.
1	3	3	4	5	6	7
1 Santa Clara, Cal.....	California Home for the Care and Training of Feeble-Minded Children.....	1885	Board of trustees.....	5	4 years	Governor.
2 Lakeville, Conn.....	Connecticut School for Imbeciles.....	1888	Board of directors.....	14	1 year	Governor.
3 Lincoln, Ill.....	Illinois Asylum for Feeble-Minded Children.....	1879	Trustees.....	3	6 years	Governor.
4 Richmond, Ind.....	Indiana School for Feeble-Minded Youth.....	1879	Board of trustees.....	3	2-4 years	Governor.
5 Glenwood, Iowa.....	Iowa Institution for Feeble-Minded Children.....	1877	Board of trustees.....	3	6 years	Legislature.
6 Winfield, Kans.....	Kansas State Asylum for Idiotic and Imbecile Youth.....	1881	Board of trustees.....	5	3 years	Governor, confirmed by the Senate.
7 Frankfort, Ky	Kentucky Institution for the Education and Training of Feeble-Minded Children.....	1860	Board of commissioners	9	6 years	Governor.
8 Ellicott City, Md	Font Hill Private Institution for Feeble-Minded Children.....	1886	.....		
9 Amherst, Mass	Home School for Nervous and Delicate Children.....	1882	.....		
10 Barre, Mass	Private Institution for the Education of Feeble-Minded Youth.....	1848	Superintendents.....	3	Life	
11 FAYVILLE, Mass.....	Hillside School.....	1870	.....		
12 South Boston, Mass. (728 Eighth street).....	Massachusetts School for the Feeble-Minded.....	1848	Board of trustees.....	12	3 years	Governor and corporation.
13 Kalamazoo, Mich.....	Wilbur Home and School for the Feeble-Minded.....	1884	C. T. Wilbur, M. D.....			
14 Faribault, Minn.....	Minnesota School for Feeble-Minded.....	1879	Board of directors.....	7	5 years	Governor.
15 Beatrice, Nebr	Nebraska Institution for Feeble-Minded Youth.....	1887	Board of public lands and buildings.....	4	2 years	Elected.
16 Vineland, N. J	New Jersey Home for the Education and Care of Feeble-Minded Children.....	1888	Board of directors.....	13	1 to 4 years	The association.
17 Amityville, N. Y., (Long Island).....	Brunswick Home	1888	Board of trustees.....			
18 Newark, N. Y	New York State Custodial Asylum for Feeble-Minded Women.....	1878	Board of trustees.....	9	6 years	Governor, with consent of the Senate.
19 New York, N. Y	Segrin Physiological School for Feeble-Minded Children.....	1878	.....		
20 Syracuse, N. Y.....	New York State Asylum for Idiots	1851	Board of trustees.....	8	8 years	Governor and Senate.
21 Columbus, Ohio	Ohio Institution for Feeble-Minded Youth	1857	Board of trustees.....	5	5 years	Governor and Senate.
22 Elwyn, Pa.....	Pennsylvania Training School for Feeble-Minded Children.....	1853	Board of directors	21		Members of corporation.

TABLE 94.—Statistics of Institutions for the Feeble-Minded for 1887-88; from Replies to Inquiries by the United States Bureau of Education.—PART II.

	Name.	Executive.			Instruction is given—		Has Cottage System.	Number of Hours	Physical Training.
		Name.	Title.	By Whom Appointed.	By Kindergarten Method.	In Music.			
							2	8	9	10	11	12	13	14	15
1	California Home for the Care and Training of Feeble-Minded Children.	A. Edgar Osborne, M. D., Ph. D.	Superintendent ..	Board of trustees....	Yes..	Yes..	No ..	6	Gymnasium and cal- isthenics.
2	Connecticut School for Imbeciles	G. H. Knight, M. D.	Superintendent ..	Board of directors....	Yes..	Yes..	No ..	4½	Gymnastics and cal- isthenics.
3	Illinois Asylum for Feeble-Minded Children	Wm. B. Fish, M. D.	Superintendent ..	Trustees	Yes..	Yes..	No ..	5½	Gymnastics and cal- isthenics.
4	Indiana School for Feeble-Minded Youth.....	John G. Blake	Superintendent ..	Board of trustees....	Yes..	.....	Yes..	6	Gymnasium.
5	Iowa Institution for Feeble-Minded Children ..	F. M. Powell, M. D.	Superintendent ..	Board of trustees....	No ..	Yes..	Yes..	6	Gymnasium.
6	Kansas State Asylum for Idiotic and Imbecile Youth.	H. M. Greene.....	Superintendent ..	Board of trustees....	No ..	.....	No ..	5	Calisthenics.
7	Kentucky Institution for the Education and Training of Feeble-Minded Children.	John Q. A. Stewart, M. D.	Superintendent ..	Governor	Yes..	.....	No ..	4	Gymnastics.
8	Font Hill Private Institution for Feeble-Minded Children.	Samuel J. Fort, M. D.	Superintendent ..	.....	Yes..	.....	Yes..	6	Gymnastics.
9	Home School for Nervous and Delicate Children.	Mrs. W. D. Herrick.....	Principal.....	.....	Yes..	Yes..	.....	6	Gymnastics.
10	Private Institution for the Education of Feeble-Minded Youth.	.....	.....	.....	Yes..	Yes..	.....	5½	Gymnastics and cal- isthenics.
11	Hillside School.....	Mesdames Knight and Green.	Principals.....	.....	No ..	Yes..	No ..	4	Military drill and cal- isthenics.
12	Massachusetts School for the Feeble-Minded.....	Walter E. Fernald	Superintendent ..	Board of trustees....	Yes..	No ..	No ..	6	All usual appliances.
13	Wilbur Home and School for the Feeble-Minded.	C. T. Wilbur, M. A., M. D.	Superintendent ..	Board of directors....	Yes..	Yes..	Yes..	5	Gymnasium.
14	Minnesota School for Feeble-Minded	A. C. Rogers, M. D.	Superintendent ..	Board of public lands	Yes..	.....	Yes..	6	Gymnastics and cal- isthenics.
15	Nebraska Institution for Feeble-Minded Youth.	J. T. Armstrong, M. D.	Superintendent ..	and buildings.	Yes..	.....	Yes..	5	Gymnastics.
16	New Jersey Home for the Education and Care of Feeble-Minded Children.	Rev. S. O. Garrison.....	Superintendent ..	Board of directors....	Yes..	Yes..	Yes..	5	None.
17	Brunswick Home.....	Rev. O. F. Brown.....	Superintendent ..	Board of trustees....	No ..	Yes..	No ..	2	Gymnasium.
18	New York State Custodial Asylum for Feeble-Minded Women.	W. L. Willett.....	Superintendent ..	Board of trustees....	No ..	.....	.....	5	Calisthenics.
19	Seguin Physiological School for Feeble-Minded Children.	Mrs. E. M. Segula	Principal.....	.....	Yes..	.....	.....	5½	Calisthenics.
20	New York State Asylum for Idiots	J. C. Carson, M. D.	Superintendent ..	Board of trustees....	Yes..	Yes..	Yes..	5	Calisthenics.
21	Ohio Institution for Feeble-Minded Youth.....	G. A. Doren, M. D.	Superintendent ..	Board of trustees....	Yes..	.....	No ..	5½	Calisthenics.
22	Pennsylvania Training School for Feeble-Minded Children.	Isaac M. Korlin, M. D.	Medical superin- tendent.	Board of directors....	Yes..	.....	No ..	6	Calisthenics.

TABLE 94.—Statistics of Institutions for the Feeble-Minded for 1887-88; from Replies to Inquiries by the United States Bureau of Education.—PART III.

	Post-Office Address.	Name.	Year of First Opening.	Instructors.		Pupils.				Receipts.				Expenditures.				Number of Volumes in Library.
				Male.	Female.	Male.	Female.	Kindergarten.	Musie.	Appropriations.	For "Beneficial."	Tuition Fees.	Buildings, etc.	Salaries.	Other purposes.			
	I	2	16	17	18	19	20	21	22	23	24	25	26	27	28	29		
1	Santa Clara, Cal.....	California Home for the Care and Training of Feeble-Minded Children.	1885	1	2	(a12)			12	\$42,612		\$2,376	\$17,269	\$10,591	\$15,141			
2	Lakeville, Conn.....	Connecticut School for Imbeciles.	1858		3	(a127)	31	38					9,500	22,000	40,500			
3	Lincoln, Ill.....	Illinois Asylum for Feeble-Minded Children.	1885	1	9	224	185	40	25	72,000				7,500	20,860			
4	Richmond, Ind.....	Indiana School for Feeble-Minded Youth.	1879	0	7	122	118	32		28,000		360	20,000	20,000	22,000			
5	Clewood, Iowa.....	Iowa Institution for Feeble-Minded Children.	1877	1	11	(a370)			18	62,000		0	1,912	5,187	76,656	0		
6	Winfield, Kans.....	Kansas State Asylum for Idiotic and Imbecile Youth.	1881		2	66	50			18,000								
7	Frankfort, Ky.....	Kentucky Institution for the Education and Training of Feeble-Minded Children.	1860		5	(a166)		40		32,000		1,500	700	7,500	25,000	250		
8	Ellicott City, Md ..	Font Hill Private Institution for Feeble-Minded Children.	1886	1	2	(a10)		6				5,000	600	2,000	1,550	200		
9	Amherst, Mass.....	Home School for Nervous and Delicate Children	1882	2	1	5	4		3					1,500				
10	Barre, Mass.....	Private Institution for the Education of Feeble-Minded Youth.	1848		5			8	17									
11	Fayville, Mass.....	Hillside School.	1870	0	2	(bas)		0	1									
12	South Boston, Mass.	Massachusetts School for the Feeble-Minded.	1848	0	6	131	99	26	0	13,776	\$25,000			14,296	21,207			
13	Kalamazoo, Mich. (728 Eighth St.).	Wilbur Home and School for the Feeble-Minded	1884		2	30	9	39	39									
14	Faribault, Minn.....	Minnesota School for Feeble-Minded	1879		4	117	75	22		65,078				26,000	12,731	24,518	36	
15	Beatrice, Nebr.....	Nebraska Institution for Feeble-Minded Youth.	1887		3	43	38	18		38,000				20,000	3,800	12,705	50	
16	Vineland, N. J.....	New Jersey Home for the Education and Care of Feeble-Minded Children.	1888		2	19	11	20	3			2,883	676					
17	Amityville, N. Y. (Long Island).	Brunswick Home.	1888	1	1	(27)												
18	Newark, N. Y.....	New York State Custodial Asylum for Feeble-Minded Women.	1878		1		194	0		30,000	46,000		46,000	5,159	21,000			
19	New York, N. Y.....	Seguin Physiological School for Feeble-Minded Children.	1878		5	4	7	4										
20	Syracuse, N. Y.....	New York State Asylum for Idiots.	1851	1	9	252	240	20	21	80,000	6,966	4,854	32,377	24,374	64,423			
21	Columbus, Ohio.....	Ohio Institution for Feeble-Minded Youth.	1857		21	509	315		212	198,141	7,073		12,424	14,508	106,994			
22	Elwyn, Pa.....	Pennsylvania Training School for Feeble-Minded Children.	1853		11	(a651)		51		60,000	34,155	21,812	15,726	30,335	73,016	1,000		

^a Number present June 1, 1888.^b Of these eight inmates only four are feeble-minded.^c Includes appropriation for deaf and blind.

REFORM SCHOOLS.

NOTES FROM CATALOGUES AND RETURNS.

COLORADO.

State Industrial School, Golden, Colo.—Thirty-five acres of tillable land were added to this institution during the past year and a girls' department established. The inmates are divided into five families, according to size and age, the girls forming one family.

CONNECTICUT.

Connecticut State Reform School, Meriden, Conn.—This school is now conducted on the cottage system. In his report for the year ending June 30, 1888, the superintendent, speaking of the improvement evident in the institution, says: "This most desirable change could never have been accomplished without the adoption of the cottage plan, a plan which was new to Connecticut, but was no experiment with your superintendent, for a practical experience of twenty years previous to entering the Connecticut school had demonstrated its utility, correctness, and practicability as the best system for reformatory purposes. * * * Universal satisfaction now exists with the system wherever it has been tried."

LOUISIANA.

Boys' House of Refuge, New Orleans, La.—The reformatory work of this institution is much impeded by the failure of the State Legislature to enact a law regulating the length of term of commitments. It is supported by municipal appropriation and funds from other sources, the State having made no provision for its maintenance. The institution has a well-equipped shoe factory, the revenue from which pays the employes engaged to instruct the boys.

MASSACHUSETTS.

Plummer Farm School, Salem, Mass.—A carpenter shop has been added at this institution, and boys are taught the use of tools, cane-seating, gardening, etc. The cottage system is followed.

Lyman School for Boys, Westborough, Mass.—The school is made up of five families or cottages, each cottage having from twenty-five to thirty occupants. Classification is based on degree of "hardness," age, and state of advancement in school work. Carpentry and cane-seating are taught, and provision is made for eight boys in the printing office.

MICHIGAN.

State Industrial Home for Girls, Adrian, Mich.—By a change of regulations girls under ten years of age are not now sent to this institution. Inmates are classified as far as possible according to moral fitness and are promoted to higher grades as improvement is shown.

NEW JERSEY.

New Jersey State Reform School, Jamesburg, N. J.—The law has been so amended that boys under sixteen years of age are committed to this institution for all crimes except murder. The superintendent urges the establishment of a reformatory for delinquents between the ages of sixteen and twenty-five, for whom this school does not provide, and who are now sent to jails and the State prisons.

NEW YORK.

New York State Reformatory, Elmira, N. Y.—By recent action of the State Legislature prohibiting the employment of inmates of prisons at productive industries, the workshops of this institution are closed. "For exercise" the inmates have been formed into companies, and regular military drill and training introduced.

New York Juvenile Asylum, Randall's Island, N. Y.—Children, male and female, between the ages of seven and fourteen, are committed to this institution, and many are also voluntarily placed here for training by parents and guardians. The institution is conducted on the congregate system, but inmates are classified according to age, character, and ability. Carpentry, shoemaking, tailoring, farming, etc., are taught.

OHIO.

Cincinnati House of Refuge, Cincinnati, Ohio.—Measures are being taken for the introduction of an "industrial training school" into this institution.

PENNSYLVANIA.

House of Refuge, Philadelphia, Pa.—The boys of this institution are to be removed to the country; the site for the erection of necessary buildings on the cottage plan is already purchased, and \$300,000 in hand for that purpose.

RHODE ISLAND.

Lockanossct School for Boys, Howard, R. I.—By the provision of a separate workshop the younger boys are entirely isolated from the older at all times. The classification of inmates is based altogether on age. Printing, tailoring, etc., are taught.

WISCONSIN.

Wisconsin Industrial School for Girls and Young Boys, Milwaukee, Wis.—The last State Legislature imposed on this institution a penal character not contemplated by its founders, as set forth in the act of incorporation. The inmates are classified into four families, the classification based on moral character and age, and the school-rooms are graded after the plan of the public school.

TABLE 95.—Summary of Statistics of Reform Schools for 1887-88.

State.	Number of Insti- tutions.	Number Having Cottage System	Instructors.			Pupils.			Receipts.	Expendi- tures.	Number of Vol- unteers in Li- brary.
			Male.	Female.	Total.	Male.	Female.	Total.			
North Atlantic Division:											
Maine.....	1	.....	1	3	4	138	0	138	\$24,000	\$35,000	1,769
New Hampshire.....	1	.....	.....	3	3	96	22	118	20,000	6,000	600
Vermont.....	1	.....	.....	.....	.....	105	16	121	16,637	15,848	.....
Massachusetts.....	12	4	9	31	40	{ 1,080 347	(495) 0	{ 1,990 347	159,129	116,458	8,239
Rhode Island.....	1	1	.....	4	4	347	0	347	45,000	27,000	1,200
Connecticut.....	1	1	.....	8	8	662	.....	662	101,112	101,112	2,000
New York.....	7	1	56	48	104	{ 5,721 497	(34) 1,606	{ 7,361 569	475,923	435,655	15,771
New Jersey.....	3	2	1	12	13	{ 752 520	92	{ 1,450 178	35,864	28,582	100
Pennsylvania.....	2	1	18	7	25	.....	.....	.....	301,015	132,068	1,500
Total.....	29	10	85	116	201	{ 9,166 (1,281)	2,329	{ 12,776 2,329	1,178,680	887,723	31,179
South Atlantic Division:											
Maryland.....	2	1	17	2	19	858	0	858	58,000	97,612	800
District of Columbia.....	1	1	4	0	4	221	0	221	68,116	68,100	500
Total.....	3	2	21	2	23	1,079	0	1,079	126,116	165,712	1,300
South Central Division:											
Kentucky.....	1	.....	.....	2	2	.....	82	82	.....	.....	.....
Louisiana.....	1	.....	1	.....	1	253	.....	253	20,000	9,780	100
Total.....	2	.....	1	2	3	253	82	335	20,000	9,780	100
North Central Division:											
Ohio.....	3	1	2	45	47	1,317	428	1,745	139,839	136,492	2,313
Indiana.....	2	1	2	5	7	642	180	822	90,000	29,991	.....
Illinois.....	1	1	1	10	11	.....	104	104	.....	.....	800
Michigan.....	1	1	1	1	2	891	348	1,239	136,599	135,325	4,370
Wisconsin.....	2	2	3	16	19	.....	.....	.....	64,843	63,589	700
Minnesota.....	2	4	2	5	10	(360)	.....	.....	48,680	48,680	900
Iowa.....	1	1	1	4	5	270	39	309	.....	.....	.....
Total.....	1	1	4	8	12	.....	111	111	.....	.....	.....

North Central Division—Continued.

Missouri.....	1	1	4	3	7	(242) (213)	242	41,000	41,000	500
Nebraska.....	1	1	5	2	7	265	213	87,620	87,620	1,400
Kansas.....	1	1	2	3	5	.....	266	32,500	31,230	180
Total.....	17	10	29	106	135	{ (815) 3,386	{ 5,411 1,210	641,081	573,851	11,163
Western Division:										
Colorado.....	1	1	5	0	5	(135)	135	34,167	40,748	759
California.....	1	.....	3	3	6	274	363	38,000	37,689	12,000
Total.....	2	1	8	3	11	{ (135) 274	{ 498 89	72,167	78,437	12,750
SUMMARY.										
North Atlantic Division.....	29	10	85	116	201	{ (1,281) 9,166	{ 12,776 2,329	1,178,080	887,723	31,179
South Atlantic Division.....	3	2	21	2	23	1,079	698	126,116	165,712	1,300
South Central Division.....	2	.....	1	2	3	253	335	20,000	9,780	100
North Central Division.....	17	10	29	106	135	{ (815) 3,386	{ 5,411 1,210	641,081	573,851	11,163
Western Division.....	2	1	8	3	11	{ (135) 274	{ 498 89	72,167	78,437	12,750
Total, for 1887-88.....	53	23	144	229	373	{ (2,231) 14,158	{ 20,099 3,710	2,038,044	1,715,503	56,492
Total, for 1886-87.....	56	.....	.....	.....	1,187	.....	14,444	.....	.....	.....

NOTE.—The "House of Shelter" at Albany, N. Y., has ceased to exist.

The "House of Refuge" at Louisville, Ky., and the "Female House of Refuge" at Baltimore, Md., have also probably been discontinued, as no report has been received from these institutions for several years.

TABLE 93.—Statistics of Reform Schools for 1887-88; from Replies to Inquiries by the United States Bureau of Education.—PART I.

	Post-Office Address.	Name.	Controlling Body.				By whom Appointed.
			Year of First Opening.	Name.	No.	Term.	
1	2	3	4	5	6	7	
1	San Francisco, Cal.....	Industrial School.....	1859	Board of supervisors.....	3	2 years.....	Governor, approved by the Senate.
2	Golden, Colo.....	State Industrial School.....	1881	Board of control.....	3	6 years.....	
3	Meriden, Conn.....	State Reform School.....	1853	Board of trustees.....	12	4 years.....	President of the United States.
4	Washington, D. C.....	Reform School.....	1870	Board of trustees.....	8	3 years.....	
5	South Evanston, Ill.....	Illinois Industrial School for Girls*.....	1877	Board of managers.....	3	4 years.....	Legislature.
6	Indianapolis, Ind.....	Indiana Reformatory Institution for Women and Girls.....	1872	Board of control.....	3	4 years.....	Governor and Legislature.
7	Plainfield, Ind.....	Indiana Reform School for Boys.....	1868	Board of control.....	3	4 years.....	Governor.
8	Mitchellville, Iowa.....	Iowa Industrial School, Girls' Department*.....	1878	Board of charities.....	5	4 years.....	City council, Governor and council.
9	North Topeka, Kans.....	State Reform School.....	1881	Sisters of the Good Shepherd.....	13	Indefinite.....	
10	Newport, Ky. (Highland Avenue).....	House of the Good Shepherd.....	1866	Board of commissioners.....	7	Indefinite.....	(a) Mayor and aldermen.
11	New Orleans, La.....	Boys' House of Refuge.....	1843	Board of trustees.....	5	2 years.....	
12	Portland, Me. (located at Cape Elizabeth).....	State Reform School.....	1853	Board of trustees.....	7	Life.....	Mayor.
13	Carroll P. O., Balto. Co., Md.....	St. Mary's Industrial School.....	1886	Board of managers.....	16	3 years.....	Mayor and aldermen.
14	Cheltenham, Md.....	House of Reformation for Colored Boys.....	1872	Board of directors.....	9	3 years.....	Mayor and aldermen.
15	Boston, Mass.....	Marcella Street Home.....	1851	Board of directors.....	9	3 years.....	Mayor and aldermen.
16	Boston, Mass.....	Truant School.....	1877	Trustees.....	7	5 years.....	City government.
17	Boston, Mass.....	State Industrial School for Girls.....	1869	Board of trustees.....	7	2 years.....	City council.
18	Lancaster, Mass.....	Lawrence Industrial School.....	1853	Overseers of poor.....	7	1 year.....	Governor.
19	Lawrence, Mass.....	Lowell Reform School.....	1854	Overseers of the poor.....	6	5 years.....	Mayor.
20	Lowell, Mass.....	City Truant School.....	1851	Overseers of the poor.....	10	Indefinite.....	Governor, with approval of council, Legislature.
21	New Bedford, Mass.....	Canning Truant School.....	1873	Board of trustees.....	3	6 years.....	
22	North Cambridge, Mass.....	State Primary School.....	1866	Trustees.....	5	6 years.....	
23	Palmox, Mass.....	Punisher Farm School.....	1870	Board of control.....	3	6 years.....	
24	Salant, Mass.....	Lynn School for Boys.....	1843	Board of commissioners.....	3	6 years.....	
25	Westborough, Mass.....	Worcester Truant School.....	1863	Board of control.....	5	6 years.....	
26	Worcester, Mass.....	State Industrial Home for Girls.....	1881				
27	Adrian, Mich.....						

28	Detroit, Mich.	1871	Board of control	3	6 years	Governor.
29	Detroit, Mich.	1882	Board of managers	4	4 years	Governor.
30	Lansing, Mich.	1883	State board	5	4 years	Mayor.
31	St. Paul, Minn.	1884	State board	4	2 years	Elected.
32	St. Louis, Mo.	1881	Board of trustees	7	2 years	Governor and council.
33	Kearney, Neb.	1883	Board of trustees	6	3 years	Legislature.
34	Muncie, N. H.	1867	Board of trustees	12	2 years	Governor and Legislature.
35	Jamesburg, N. J.	1871	Board of trustees	7	2 years	(b) Elected.
36	Trenton, N. J.	1874	City council	20	2 years	Self-appointed.
37	Verona, N. Y.	1887	Board of directors	12	1 year	Governor.
38	Brooklyn, N. Y. (Sprengers Hills, 26th Ward).	1876	Board of managers	5	5 years	Society for the Reformation of Juvenile Delinquents.
39	Canam, Four Corners, N. Y.	1895	Board of managers	24	3 years	Self-appointed.
40	Elmira, N. Y.	1851	Board of directors	23	Indefinite	Self-perpetuating.
41	New York, N. Y. (Station 1).	1860	Board of managers	9	3 years	(c)
42	New York, N. Y. (176th St. and 10th Ave.).	1869	Board of trustees	5	5 years	Governor.
43	Utica, N. Y.	1853	Board of managers	10	4 years	Governor.
44	West Chester, N. Y.	1854	Board of managers	31	3 years	(d) Governor and Senate.
45	Cincinnati, Ohio.	1851	Board of trustees	3	6 years	Governor and Legislature.
46	Delaware, Ohio.	1865	Board of trustees	5	5 years	Governor.
47	Lancaster, Ohio.	1875	Board of trustees	5	5 years	Governor.
48	Morgantown, Pa.	1865	Board of trustees	5	5 years	Governor.
49	Philadelphia, Pa.	1865	Board of trustees	5	5 years	Governor.
50	Howard, R. I.	1865	Board of trustees	5	5 years	Governor.
51	Vergennes, Vt.	1865	Board of trustees	5	5 years	Governor.
52	Milwaukee, Wis.	1865	Board of trustees	5	5 years	Governor.
53	Waukesha, Wis.	1861	Board of trustees	5	5 years	Governor.

* From Report of the Commissioner of Education for 1886-87.

a. Two by governor, two by mayor of Baltimore, and twelve by subscribers.

b. Two elected annually, two appointed by city council, and the mayor of the city president *ex officio*.

c. Two by court of common pleas, two by superior court, three by common council, and two by contributors.

d. Twenty-six elected by contributors, three appointed by courts, and two by the mayor of the city.

TABLE 96. — *Statistics of Reform Schools for 1887-88; from Replies to Inquiries by the United States Bureau of Education.* — PART II.

Name.	Executive.			Instruction is Given—		Has Cottage System.	Number of Hours.	Physical Training.
	Name.	Title.	By whom Appointed.	By Kindergarten Method.	In Music.			
2	8	9	10	11	12	13	14	15
1 Industrial School.....	Hon. J. W. Silk.....	Superintendent.	Board of supervisors.	No.....	Yes.....	No.....	8	
2 State Industrial School.....	William C. Sampson.....	Superintendent.	Board of control.....	No.....	Yes.....	Yes.....	4	Military drill.
3 State Reform School.....	George E. Howe.....	Superintendent.	Board of trustees.....	No.....	Yes.....	Yes.....	3	None.
4 Reform School.....	G. A. Shallenberger.....	Superintendent.	Board of trustees.....	No.....	Yes.....	Yes.....	3½	
5 Illinois Industrial School for Girls*.....	Mary Lyon.....	Superintendent.	Board of trustees.....	No.....	Yes.....	No.....	6	Calisthenics.
6 Indiana Reformatory Institution for Women and Girls.....	Miss Sarah F. Keely.....	Superintendent.	Board of managers.....	No.....	Yes.....	No.....	4	Gymnasium.
7 Indiana Reform School for Boys.....	Thos. J. Charlton.....	Superintendent.	Board of control.....	No.....	Yes.....	Yes.....	4½	Military drill.
8 Iowa Industrial School, Girls' Department*.....	C. C. Cory.....	Superintendent.	Board of charities.....	No.....	Yes.....	Yes.....	4	
9 State Reform School.....	J. F. Buck.....	Superintendent.	Board of trustees.....	No.....	Yes.....	No.....	4	
10 House of the Good Shepherd.....	Mother M., of St. Scholastica.	Superiorress.....	Commissioners.....	No.....	Yes.....	No.....	4	
11 Boys' House of Refuge.....	Capt. W. C. Staunton.....	Superintendent.	Board of trustees.....	No.....	Yes.....	No.....	4	
12 State Reform School.....	Jas. R. Farrington.....	Superintendent.	Board of trustees.....	No.....	Yes.....	No.....	4	
13 St. Mary's Industrial School.....	Cardinal Gibbons.....	President.....	Board of trustees.....	No.....	Yes.....	No.....	3½	
14 House of Reformation for Colored Boys.....	E. A. Rhodes.....	Superintendent.	Board of managers.....	No.....	Yes.....	Yes.....	4½	
15 House of Reformation.....	John C. Whiton.....	Superintendent.	Board of directors.....	No.....	Yes.....	No.....	5	None.
16 Marcelle Street Home.....	Alford B. Heath.....	Superintendent.	Board of directors.....	Yes.....	Yes.....	No.....	4	None.
17 Truant School.....	John O. Whiton.....	Superintendent.	Trustees.....	No.....	Yes.....	Yes.....	4	Gymnastics.
18 State Industrial School for Girls.....	Mrs. I. L. Brackett.....	Superintendent.	Board of trustees.....	No.....	Yes.....	Yes.....	3½	
19 Lawrence Industrial School.....	Albert Pindar.....	Superintendent.	Overseers of poor.....	No.....	No.....	No.....	5	
20 Lowell Reform School.....	P. S. May.....	Superintendent.	Overseers of poor.....	No.....	Yes.....	No.....	4	
21 City Truant School.....	Martin L. Eldridge.....	Superintendent.	Board of trustees.....	Yes.....	No.....	No.....	5	
22 Cambridge Truant School.....	Amos Andrews.....	Superintendent.	Trustees.....	No.....	No.....	Yes.....	4	
23 State Primary School.....	Charles A. Johnson.....	Superintendent.	Trustees.....	No.....	No.....	Yes.....	4	
24 Plummer Farm School.....	T. F. Chapin.....	Superintendent.	Trustees.....	No.....	No.....	Yes.....	4	Gymnasium and calisthenics.
25 Lyman School for Boys.....		Superintendent.		No.....	No.....	Yes.....	4	
26 Worcester Truant School.....	E. F. Parkhurst.....	Superintendent.	Board of control.....	No.....	No.....	No.....	5	
27 State Industrial Home for Girls.....	Margaret Scott.....	Superintendent.	Board of inspectors.....	No.....	Yes.....	Yes.....	3½	
28 Detroit House of Correction School (for adults).....	Joseph Nicholson.....	Superintendent.	Board of trustees.....	No.....	No.....	No.....	4	
29 Preservation Class of the House of the Good Shepherd.*.....	Mother Mary of St. Francis Patrick.	Superintendent.	Trustees.....	No.....	No.....	No.....	4	
30 Michigan State Reform School.....	Cornelius A. Gower.....	Superintendent.	Board of control.....	No.....	No.....	Yes.....	4½	None.

31	Minnesota State Reform School.....	J. W. Brown.....	Superintendent.....	Board of managers.....	No.....	Yes.....	Yes.....	4½
32	House of Refuge.....	John D. Shaffer.....	Superintendent.....	Board of managers.....	Yes.....	No.....	No.....	4
33	State Industrial School for Juvenile Offenders.....	John T. Mallieu.....	Superintendent.....	State board.....	No.....	Yes.....	Yes.....	4
34	State Industrial School.....	J. C. Ray.....	Superintendent.....	Board of trustees.....	No.....	No.....	No.....	3½
35	New Jersey State Reform School.....	Ira Otterson.....	Superintendent.....	Board of trustees.....	No.....	Yes.....	Yes.....	6
36	State Industrial School for Girls.....	Rodolphus Bingham.....	President.....	Legislature, approved by the governor.....	No.....	No.....	No.....	2
37	Newark City Home.....	C. M. Harrison.....	Superintendent.....	Board of trustees.....	No.....	Yes.....	No.....	5
38	Juvenile House of Industry.....	Patrick H. Corrigan.....	Superintendent.....	City council.....	No.....	Yes.....	Yes.....	5½
39	Burnham Industrial Farm.....	Sumner B. Merrick.....	Superintendent.....	Board of managers.....	No.....	Yes.....	No.....	1½
40	New York State Reformatory (for men).....	Z. R. Brockway.....	General superintendent.....	Board of managers.....	No.....	No.....	No.....	4
41	New York House of Refuge.....	Israel C. Jones.....	Superintendent.....	Board of managers.....	No.....	Yes.....	No.....	5
42	New York Juvenile Asylum.....	Elisha M. Carpenter.....	Superintendent.....	Board of directors.....	No.....	Yes.....	No.....	5
43	St. Vincent Industrial School.....	Brother Adelerian.....	Superintendent.....	Board of managers.....	No.....	No.....	No.....	5
44	New York Catholic Protectory.....	Henry L. Hognet.....	President.....	Board of managers.....	No.....	Yes.....	No.....	5
45	Cincinnati House of Refuge.....	Henry Oliver.....	Superintendent.....	Board of directors.....	Yes.....	No.....	No.....	3
46	Girls' Industrial Home*.....	J. M. Crawford.....	Superintendent.....	Trustees.....	No.....	No.....	Yes.....	5
47	Boys' Industrial School.....	Col. Chas. Douglas.....	Superintendent.....	Board of managers.....	No.....	Yes.....	Yes.....	5
48	Pennsylvania Reform School.....	J. A. Quay.....	Superintendent.....	Board of managers.....	No.....	No.....	No.....	3
49	House of Refuge.....	J. Hood Lavery.....	Superintendent.....	Board of charities and correction.....	No.....	No.....	Yes.....	3
50	Lockanoset School for Boys.....	F. H. Nibecker.....	Superintendent.....	Board of trustees.....	No.....	No.....	No.....	5
51	Vermont Reform School.....	E. T. Healey.....	Superintendent.....	Board of managers.....	Yes.....	Yes.....	Yes.....	5½
52	Wisconsin Industrial School for Girls and Young Boys.....	Harriet C. Hunt.....	Superintendent.....	Board of supervision.....	No.....	No.....	Yes.....	5
53	Wisconsin Industrial School for Boys.....	W. H. Sleep.....	Superintendent.....	Board of supervision.....	No.....	No.....	Yes.....	5

* From the Report of the Commissioner of Education for 1886-87.

TABLE 96.—Statistics of Reform Schools for 1887-88; from Replies to Inquiries by the United States Bureau of Education.—PART III.

Post-Office Address.	Name.	Year of First Opening.	Instructors.		Pupils.			Receipts.			Expenditures.			Number of Volumes in Library.	
			Male.	Female.	Male.	Female.	Kindergarten.	Music.	Appropriations.	For Beneficiaries.	Tuition Fees.	Buildings, etc.	Salaries.		Other Purposes.
1	2	16	17	18	19	20	21	22	23	24	25	26	27	28	29
1 San Francisco, Cal.	Industrial School	1859	3	3	274	89	0	25	\$38,000			\$1,120	\$14,613	\$21,953	12,000
2 Golden, Colo.	State Industrial School	1881	5	0	(a135)			135	27,000	0	\$7,167	6,430	10,434	23,884	750
3 Meriden, Conn.	State Reform School	1883	8	633	633	0	0	427	81,698		16,414	82,471	18,365	50,276	2,000
4 Washington, D. C.	Reform School	1870	4	0	221	0	0	221	665,000		3,116	35,000	11,600	21,500	600
5 South Evansville, Ind.	Illinois Industrial School for Girls	1877	1	10	104	104	0								800
6 Indianapolis, Ind.	Indiana Reformatory Institution for Women and Girls	1872		3		180	0	135	30,000			3,501	8,800	17,690	
7 Plainfield, Ind.	Indiana Reform School for Boys	1863	2	2	642		0		60,000						
8 Mitchellville, Iowa	Iowa Industrial School, Girls' Department	1878	4	8		111									
9 North Topeka, Kansas	State Reform School	1881	2	3	265		0	16	32,500			5,424	11,207	14,599	180
10 Newport, Ky. (Highland Avenue)	House of the Good Shepherd	1866	2		682	0									
11 New Orleans, La.	Boys' House of Refuge	1843	1		253		0		10,000		10,000		3,780	6,000	100
12 Portland, Me. (located at Cape Elizabeth)	State Reform School	1853	1	3	138	0	0	133	17,000		7,000	2,500	6,500	16,000	1,769
13 Carroll Post-Office, Baltimore County, Md.	St. Mary's Industrial School	1866	12		6411	0	0	30	35,000	0	0	13,746	6,279	51,155	800
14 Cheltenham, Md.	House of Reformation for Colored Boys	1872	5	2	47	0	0	447	20,000		3,000	2,904	5,640	17,838	0
15 Boston, Mass.	House of Reformation	1851	2	1	80	1	0	80							
16 Boston, Mass.	Marcella Street Home	1877	2	5	436	258	30	0	56,255			1,294	12,884		1,200
17 Boston, Mass.	Truant School	1880	2	0	83	0	0	86							
18 Lancaster, Mass.	State Industrial School for Girls	1850	0	3	0	166	0	145	29,263		633	10,433	7,934	11,493	1,600
19 Lawrence, Mass.	Lawrence Industrial School	1874	1	53	53		0		2,500		3,543		2,237	3,514	800
20 Lowell, Mass.	Lowell Reform School	1851	3		60		0	0						(2,656)	
21 New Bedford, Mass.	City Truant School	1879		1	216				2,000					400	850
22 North Cambridge, Mass.	Cambridge Truant School	1854	0	12	(495)	19	0	23	(c)		300			17,214	1,000
23 Palmer, Mass.	State Primary School	1866	0	1	42	0	0		54,000	0	7,400	0	2,150	37,684	739
24 Salem, Mass.	Plummer Farm School	1870	0	1	237		0							2,689	700
25 Westborough, Mass.	Lynn School for Boys	1848	5	5	287		0								1,500
26 Worcester, Mass.	Worcester Truant School	1863	1	1	42		0		3,200				300	2,900	100

27	Adrian, Mich.	1881	5	1	0	296	0	56,404	1,143	15,219	8,179	24,107	670
28	Detroit, Mich.	1871	1	1	80	26	0						1,200
29	Detroit, Mich.	1882	2			26							
	Preservation Class of the House of the Good Shepherd.*												
30	Lansing, Mich.	1886	2	8	811		0	62,783	16,269	11,745	19,206	56,869	2,500
31	St. Paul, Minn.	1868	1	4	270	39	0	42,000	6,680	6,362	13,551	28,741	900
32	St. Louis, Mo.	1854	4	3	(a242)		0		41,000		13,000	28,000	500
33	Kearney, Nebr.	1881	5	2	(a213)		0	437,020		431,500	47,000	422,120	1,400
	State Industrial School for Juvenile Offenders.												
34	Manchester, N. H.	1858	3	3	96	22		6,000	14,000	1,000	5,000	600	
35	Jamestown, N. J.	1867	7	7	a283		0						
36	Trenton, N. J.	1871	1	1	0	68		7,500	614	640	2,696		
37	Verona, N. J.	1874	1	4	214	24		25,000	2,750	4,528	6,195	14,523	100
38	Brooklyn, N. Y. (Oy-press Hills, 26th Ward).	1857	2		391		0	0					200
	Newark City Home.												
39	Canaan Four Corners, N. Y.	1887	2	0	(a34)		34						300
	Burnham Industrial Farm.												
40	Elmira, N. Y.	1876	14		a337		0	115,000	66,246	42,317	26,152	90,084	8,000
41	New York, N. Y. (Sta-tion L).	1825	5	14	875	144	0	1,019	19,523	13,815	29,110	98,478	4,054
42	New York, N. Y. (176th St. and 16th Ave.).	1851	1	17	1,299	361	0	1,660	24,919	20,725	23,609	93,260	800
43	Utica, N. Y.	1836	6	0	156	0							324
44	West Chester, N. Y.	1883	26	17	2,163	1,101	0	150					7,093
45	Cincinnati, Ohio.	1850	1	5	467	125	25	39,410	19,234	10,055	15,013	29,367	1,313
46	Delaware, Ohio.	1869	1	23		302							800
47	Lancaster, Ohio.	1853		11	850		0	64,545	16,030	7,500	23,236	51,321	
48	Morgantown, Pa.	1854	6	3	520	178	0	69,730	15,000	9,686	21,462	57,571	
49	Philadelphia, Pa.	1828	12	4	(a752)		0	215,685	6,000	4,038	(33,361)	700	
50	Howard, R. I.	1851	4	4	347		0	39,000		17,000	10,000	1,200	
51	Yonkers, N. Y.	1863			105	16		16,637		(15,848)			
52	Milwaukee, Wis.	1875	7			30		2,500	24,843	500	7,600	17,122	
	Wisconsin Industrial School for Boys and Young Boys.				(a360)		0						
53	Waukesha, Wis.	1861	5	3				37,500		16,317		22,000	700

*From the Report of the Commissioner of Education for 1886-87.

a Number present June 1, 1883.

b Congressional appropriation.

c Included in city appropriation for almshouse.

d Biennial appropriation.

e Biennial expenditure.

V.—EDUCATION OF THE COLORED RACE.

In presenting for the second time the section of this chapter which deals with the education of the colored population of the Southern States, we can only repeat that the object of the section is to bring together and within a small compass the statistics of institutions devoted to the education of the colored race. No elaborate work in the domain of ratios is attempted, we are too far from the last census for that. Nor are any ingenious statistical hypotheses made, for we are too near the next census for that. Our statistics are simple, as they well may be, since the matter with which they deal has been surveyed from every possible point of view, has again and again been presented in every conceivable statistical way, has again and again been passed upon by one of the branches of the national legislature, and has been neglected rather than defeated in the other. We doubt if there is a journal or review that has not contributed to making the subject one of the most thoroughly ventilated in the land.

Three agencies have been operating to accomplish the education of the class of persons under review—the efforts of the Southern States themselves, religious associations at the North, and the Peabody and Slater Funds. To the first of these are to be attributed the public schools; to the second the many so-called colleges, normal schools and universities. The income of the Peabody Fund has been mainly devoted to training teachers, and that of the Slater Fund entirely to fostering industrial and professional training.

PUBLIC SCHOOLS FOR THE COLORED RACE.

TABLE 97.—*Colored School Population, Enrolment, and Average Attendance for 1887-88.*

State.	Date of Census.	Age of Children Enumerated.	Population of School Age.		Enrolment.	Average Attendance.
			Colored.	Total.		
Alabama.....	1887	7-21	212,821	485,551	a98,396	a63,995
Arkansas.....	1888	6-21	99,784	388,165	50,570	.....
Delaware*.....	1886	6-21	55,750	542,218	53,563	.....
District of Columbia.....	1888	6-17	18,200	51,500	12,766	9,538
Florida.....	1888	6-21	33,596	63,848	*31,566	.....
Georgia.....	1888	6-18	267,657	560,281	120,553	.....
Indiana.....	1888	6-21	17,750	756,989	8,498	.....
Kentucky*.....	1886	6-20	102,647	641,638	41,952	c23,195
Louisiana.....	1887	6-18	d151,384	335,603	46,912	34,262
Maryland.....	1880	5-20	68,409	295,215	32,536	14,221
Mississippi*.....	1885	5-21	269,099	471,332	143,825	85,996
Missouri*.....	1887	6-20	47,663	838,812	30,469	.....
North Carolina.....	1888	6-21	216,837	580,819	125,884	75,230
South Carolina.....	1880	6-18	180,495	281,684	103,334	74,075
Tennessee*.....	1887	6-21	161,393	640,014	80,127	56,332
Texas.....	1883	8-16	135,184	525,110	84,463	.....
Virginia.....	1885	5-21	265,249	610,271	118,831	64,422
West Virginia.....	1888	6-21	10,426	256,350	6,130	3,557
Total.....			2,264,344	7,825,400	1,140,405	.....

* For 1886-87.

a Exclusive of city schools. These figures seem to be those of 1886-87.

b Exclusive of Wilmington, where there are four schools for colored children.

c For counties only.

d For 1885-86.

TABLE 98.—Comparative School Statistics of the Colored and White Races in States making the Distinction.

State.	Ratio of Colored School Population to Total School Population.	Ratio of Colored Enrolment to Total Enrolment.	Ratio of Colored Average Attendance to Total Average Attendance.	Ratio of Enrolment to School Population.		Ratio of Average Attendance to Enrolment.		Average Duration of School in Days.	
				Colored.	White.	Colored.	White.	Colored.	White.
1	2	3	4	5	6	7	8	9	10
	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>	<i>Per ct.</i>		
Alabama.....	43.85	a39.00	a40.57					79	80
Arkansas.....	25.76								
Delaware*.....		b14.66		b61.97	80.67			103	185
District of Columbia.....	35.34	36.73	35.98	70.31	66.23	74.54	76.79	182½	182½
Florida.....	52.62	*38.28						139½	139½
Georgia.....	47.78	38.62		45.04	65.49			65	65
Indiana.....	2.34	1.65		47.82	68.43			(133)	
Kentucky*.....	16.00	13.15	a12.79	40.87	51.41	a63.76	a62.59	a93	94
Louisiana.....	d52.01	41.95	42.77			73.04	70.63	c191	178
Maryland.....	23.19	18.43	14.97			43.71	56.06	88	90
Mississippi*.....	57.09	53.12	52.48	53.45	62.76	59.79	61.35	(190)	
Missouri.....	5.68	5.25		63.92	70.13			84	84
North Carolina.....	37.33	37.31	36.05	58.06	58.17	59.76	63.09	(105)	
South Carolina.....	64.08	53.42	53.08			71.68	72.69	62	64
Tennessee*.....	25.41	22.07	22.43	53.41	64.28	73.75	72.22	(72)	
Texas.....	25.72	23.16		62.48	71.30			(116)	
Virginia.....	43.46	35.99	34.01	44.80	61.29	54.21	59.12	(119)	
West Virginia.....	4.07	3.24	2.91	53.79	74.46	58.03	64.69	(104)	

* For 1886-87.

a Exclusive of city statistics.

b Exclusive of the enrolment, white and colored, of Wilmington.

c In cities.

d For 1885-86.

TABLE 99.—Teachers in the Public Schools for the Colored Race for 1886-87.

State.	Teachers of Colored Schools.	Average Monthly Salary of Teachers.		Pupils to a Teacher (Based on Average Attendance).	
		Colored Schools.	White Schools.	Colored Schools.	White Schools.
Alabama.....	a1,833	\$23.76	\$24.26	a34.9	a25.7
District of Columbia.....	222	62.64	69.02	43.0	39.3
Florida.....	620	*52.00	*52.00		
Georgia.....	2,512			b48.0	b37.7
Indiana.....	155			*27.9	*27.0
Kentucky*.....	1,104	c31.15	c28.41	c22.8	c22.9
Louisiana.....	685	54.80	65.60	50.0	26.6
Maryland.....	581			24.5	26.2
Mississippi*.....		26.92	34.21		
Missouri.....	*468				
North Carolina.....	2,617	21.84	26.61	23.8	29.8
South Carolina.....	d1,592				
Tennessee*.....	1,621			38.5	37.9
Texas*.....	2,127			25.8	25.1
Virginia.....	1,909			33.7	23.3
West Virginia.....	173			20.6	23.4
Total.....	18,219				

* For 1886-87.

a Exclusive of city and separate city school districts.

b Based on enrolment.

c Counties only.

d Colored teachers; number teachers of colored schools not given.

In commenting on the three tables, which are in reality but so many parts of one, we premise that their lack of complexity, and the obvious and, we hope, logical manner of arranging the columns in each, will relieve us of the necessity of any remarks except upon the statistics as a whole. The statistics are not all for the year 1887-88, and in any general remarks upon them this must be taken into consideration. The censuses are not all for the year 1887-88 nor for the year before nor the year before that; this too must be considered.

Let us exclude from the body of the statistics given in Columns 4 and 5 of Table 98, the statistics of States falling in either of two categories; first, those not reporting for the year under review, and, second, those having taken no census since 1885. This excludes the statistics of Delaware, Kentucky, Louisiana, Maryland, Mississippi, Missouri, South Carolina, Tennessee, and Virginia. We have then approximately accurate figures when treating of the relation that the enrolment of the other States bears to their present school population, something that represents the statistics of 1887-88.

The school population, white and colored, of those States which are not excluded as above is 3,668,613, and of this, 27.59 per cent. are colored. But in this calculation the statistics of Indiana and of West Virginia are included, though in both States the percentage of the colored school population in below 5 per cent. Excluding the statistics of these two States the ratio of the colored population of school age to the total school population is 37.06. Last year it was 36.85, though in the effort to cover all the ground statistics of States were admitted in that computation that we have not scrupled to throw out in this.

Now, what per cent. of these 37 colored persons in every hundred of school population is enrolled? We find it to be 53.27. In obtaining this we have used the enrolment for last year in the case of Florida and of Alabama. The total average attendance we cannot give for reasons that will suggest themselves to those who are familiar with the proper manner of obtaining that most important of all statistics of education.

But though the bases, or one of them, for obtaining statistics of the average attendance of the colored race are wanting, we have still an interesting comparison to make with the absolute figures (the average attendance being a relation) of enrolment. What part of the total enrolment, white and colored, is the colored enrolment? The answer to this, including the statistics of one State which are very unsatisfactory, is 33.06 per cent. Somewhat below the ratio of the colored population to total population, which we have shown is 37.06 per cent. It will be understood that we are using the statistics of the same States in obtaining these two ratios.

To make this plainer we will tabulate the statements just made:

Of the population of school age in the 9 States whose statistics have been used—	Per cent.
The white population of school age comprises.....	72.41
The colored population of school age comprises.....	27.59
Or, excluding Indiana and West Virginia—	
The white population of school age comprises.....	62.94
The colored population of school age comprises.....	37.06
Of this last white population of school age there is enrolled.....	63.54
Of this last colored population of school age there is enrolled.....	53.27
Of the total white and colored enrolment of 9 States the colored enrolment comprises	33.06

Only in one instance does the ratio of enrolment to school population (Columns 5 and 6 of Table 98) show better for the colored than for the whites, and that instance is where provision is made in part by the national government; for in the District of Columbia half of the expense of school affairs is provided by Congress. In considering this exception, however, it is to be carefully borne in mind that the city of Washington amounts to very much the same thing as the District, and it is too obvious to remark that it is in cities that school affairs can reach or perhaps, as we should say more hopefully, have reached their highest usefulness. In average attendance (Columns 7 and 8) the ratio for the races is much nearer, and as to number of days of schooling there is little or no difference.

As to average monthly salary of teachers there appears but little difference as far as the figures go. As to pupils to a teacher, with an exception or two, there appears to be an equality.

PRIVATE BOARDING SCHOOLS.

CHARACTER OF THE INSTRUCTION.

In our last report we spoke of the elementary character of these schools as exhibited by an examination of their catalogues. Since then we have received information on this point, which we will quote from most fully.

"Three years ago," says the agent of the John F. Slater Fund in his report for 1888, "there was occasion to make a careful investigation of the studies pursued in the higher

schools for colored people in the South. At that time in twenty-three of the leading schools for colored there were enrolled 7,273 students. By actual count it was found that less than five per cent. of the whole number were engaged in what are considered as classical studies. The rest are learning just those things that a people must first learn—the rudiments of learning—learning what will enable them to read, to write, to keep accounts, and to begin to think; learning what will prepare the best of them to teach in the common schools for their own people. It is because the colleges and higher schools are really teaching what they ought to teach that there are more than 15,000 public schools for colored children, taught by colored men and women in the South at this time. It is true that many of these schools are inferior; it is also true that many of them are as good as any in the country. What is here set forth explains the marvellous fact that about two millions of the colored people can read to-day—twenty-three years after the revolution that set them free.

"This should be added: More and more those who direct the training schools are shaping their plans to ascertain facts, and less to theories. So it will come to pass that the true theory of this work is being evolved by experience."

It thus appears that Dr. Haygood looks upon these institutions as schools for training teachers, and to this we would add (if we may supplement this authority) for training preachers, who are, after all, but teachers—teachers of men. In this consists the great usefulness of this class of schools; for seats of learning, which their name of college or university would appear to indicate, they, in general, are not. Nor does there appear to be as yet a demand for such institutions that is not being supplied by higher institutions in Northern or Western States at least, if not in several instances at home.

TABLE 100.—*Statistics of Schools for Normal, Secondary, and Collegiate Education of the Colored Race for 1887-88, by States.*

State.	Normal Schools.				
	Number.	Instructors.	Students.		Value of Property.
			Normal. ^a	Other.	
Alabama.....	4	43	499	316	\$112,180
Arkansas.....	2	9	194	299	83,650
District of Columbia.....	1	7	40	0	.....
Florida.....	1	3	0	51	8,500
Georgia.....	2	8	90	119	15,800
Mississippi.....	3	14	227	338	96,000
Missouri.....	1	7	36	126	66,000
North Carolina.....	5	20	254	400	31,750
South Carolina.....	4	23	70	661	55,000
Tennessee.....	3	32	447	172	70,000
Texas.....	1	8	140	26	30,250
Virginia.....	2	48	556	185	600,000
West Virginia.....	1	7	28	165	60,000
Total.....	30	229	2,581	2,858	1,224,130

^a This column contains the number distinctively returned as in the "teachers' training class." The following column contains the number returned as in "department below academic grade."

TABLE 100.—*Statistics of Schools for Normal, Secondary, and Collegiate Education of the Colored Race, etc.—Continued.*

State.	Secondary Schools.				
	Number.	Instructors.	Students.		Value of Property.
			Secondary.	Below Academic Grade.	
Alabama.....	2	21	66	498	\$119,400
Florida.....	1	13	30	350	75,000
North Carolina.....	3	19	101	345	40,700
Pennsylvania.....	1	8	225	202	2,500
South Carolina.....	1	7	48	622	13,500
Tennessee.....	1	2	72	178	60,100
Texas.....	4	26	364	298	143,663
Virginia.....	2	10	311	.....	95,000
Total.....	15	106	1,217	2,438	549,865

State.	Colleges of Arts and Sciences.					
	Number.	Instructors.	Students.			
			Classical.	Scientific.	Normal.	Other.
Alabama.....	1	8	9	3	60	50
Arkansas.....	1	5	13	1	.....	179
District of Columbia.....	1	17	29	0	205	.....
Georgia.....	1	11	6	.....	56	25
Kentucky.....	1	10	2	22	.....	351
Louisiana.....	4	51	29	11	90	1,074
Mississippi.....	1	9	2	.....	.....	343
North Carolina.....	2	24	78	22	.....	539
South Carolina.....	1	6	7	.....	39	210
Tennessee.....	3	37	60	7	354	1,190
Total.....	16	178	235	66	804	3,961

PROFESSIONAL SCHOOLS.

Regarding the work of the medical schools of this class, we will use the reports of the principals of two of them to bear witness to its success. President Tupper, of Shaw University, of which the Leonard Medical School is a part, observes in a late report :

"Teachers and students have been enthusiastic in their work. Good will and harmony have characterized the year's work. All the students are professing Christians, and are doing their best to prepare themselves for usefulness in their chosen profession. Our greatest difficulty is to find young men sufficiently qualified to enter upon the study of medicine, and thus be able to graduate at the end of a four years' medical course.

"To determine where the dividing line should be drawn, on the one hand to maintain a standard that shall not be beyond the average medical student, and at the same time meet the rigid requirements of medical boards of such States as North Carolina and Virginia, is a matter not easily settled. We are anxious to encourage the student in his endeavor to obtain a medical education, while we are compelled, from a sense of duty and the circumstances which environ us, to maintain a standard to which some of our medical students will probably never attain.

"Our former graduates in medicine have more than met expectations. They have readily entered into a good practice, winning the confidence of the colored people and the respect of the whites, and everything indicates that the colored physician will constitute an important factor in the education and elevation of the race."

Dr. Hubbard, dean of the Meharry Medical College of Nashville, Tenn., says:

"The past year has been in many respects the most prosperous ever enjoyed by this college. The number of students enrolled was fifteen per cent. greater than that of any previous session, and the graduating class, eighteen in number, was nearly twice as large.

"The success of our graduates has been most gratifying. Of the eighty-six living graduates one is secretary of the S. S. department of the A. M. E. Church; one is State missionary of the Baptist Church for South Carolina; two are in the employ of the United States Government; one is a professor in Livingstone College, North Carolina; three are pastors of churches; six are engaged in teaching, and seventy-two are practicing medicine. Several of those above mentioned as engaged in other occupations are also practicing their profession of medicine.

"Bishop W. F. Mallalieu, who has travelled extensively in the southern States during the past four years, recently stated that in the fourteen cities and towns which he has visited, where our graduates are located, he found that they were all doing well, and some of them exceedingly well.

"They have been treated with remarkable kindness and consideration by the white physicians, who frequently offer to loan them books and instruments, consult with them in dangerous cases, and assist in difficult surgical operations.

"Four of the graduates of the present year have passed successfully the examination of the State Medical Board of Arkansas, and received license to practice in that State.

"The school of dentistry has progressed favorably. Twelve students have been enrolled during the past session, and two received the degree of D. D. S. at our last commencement.

"At the annual meeting of the American Association of Dental Faculties, held at Washington, D. C., September, 1887, this school was admitted to membership by a unanimous vote; and this action places our graduates on an equal footing with those of other dental colleges.

"A new building is greatly needed for furnishing additional facilities for teaching dentistry and for opening a school of pharmacy. Plans have been prepared for this edifice, and efforts are now being made to secure the necessary funds for its erection."

TABLE 101.—*Statistics of Professional Schools for the Colored Race for 1887-88, by States.*

State.	Schools of Science.					Schools of Theology.			
	Number.	Instructors.	Pupils. Scientific Course.	Pupils. Preparatory Course.	Value of Property.	Number.	Instructors.	Pupils.	Value of Property.
Alabama.....						2	4	40	\$7,500
District of Columbia						1	10	160	70,000
Georgia.....						2	8	109	75,000
Louisiana.....						2	5	40	
Maryland.....						1	4	65	30,000
Mississippi.....	1	7	44	193					
North Carolina.....						1	6	15	
South Carolina.....	1	11	118	179	\$61,500	2	19	243	45,000
Texas.....						1			
Virginia.....						1	8	62	25,000
Total	2	18	62	372	61,500	13	64	725	252,500

a Ten of these are in a course leading to the degree of A. B.

The only school of law that reports statistics for the year under review is the law school of Allen University of South Carolina, which reports 2 non-resident instructors (the resident instructors not being given), and 160 different students enrolled. In the report of the agent of the John F. Slater Fund we find statistics of two medical schools. Of these the Leonard Medical School, Raleigh, N. C., had 7 lecturers, 36 students, and expended \$4,000, derived from fees (\$1,500), Slater Fund (\$500), and contributions from the North (\$2,000). The other school, the Meharry Medical College, Nashville, Tenn., had 11 lecturers, 62 students in medicine, and 12 in dentistry, receiving from the Slater Fund \$1,000, other figures not given.

TABLE 102.—*Statistics of Colored Pupils in Schools for Special Classes, for 1887-88.*

State.	In Schools for the Deaf.	In Schools for the Blind.	In Schools for the Feeble-minded.	In Reform Schools.
Arkansas.....	4			
California.....	1			6
Colorado.....				11
Connecticut.....	1		1	30
District of Columbia.....	8			96
Florida.....	(6)			
Georgia.....	29			
Illinois.....	4	5	2	
Indiana.....	5		4	4
Iowa.....		2	3	
Kansas.....	9	4	2	28
Kentucky.....	30	8		
Louisiana.....				77
Maine.....				2
Maryland.....	22	20		447
Massachusetts.....	2		5	55
Michigan.....	5			33
Minnesota.....	1			7
Mississippi.....	25			
Missouri.....	5	2		49
Nebraska.....		1		13
New Hampshire.....				2
New Jersey.....	2			173
New York.....	6	4	6	180
North Carolina.....	32	24		
Ohio.....	7	6	10	77
Pennsylvania.....	9	8	14	833
Rhode Island.....				25
South Carolina.....	11	2		
Tennessee.....	20	12		
Vermont.....				1
West Virginia.....	2			
Wisconsin.....	1			4
Total.....	{ 241 (6)	98 }	47	1,668

TABLE 103.—*Synoptic View of the Statistics of Schools for the Colored Race.*

Class of Institutions.	Number of Schools.	Teachers.	Pupils.	Value of Property.
Public schools.....		18,219	1,140,405	
Normal schools.....	30	229	5,439	\$1,224,130
Secondary schools.....	15	106	3,705	549,865
Colleges.....	16	178	5,066	1,616,550
Schools of science.....	2	13	434	61,500
Schools of theology.....	13	64	725	252,500
Schools of law.....	1		160	
Schools of medicine.....	2	13	110	
Schools for the deaf.....			241	
Schools for the blind.....			98	
Schools for the feeble minded.....			47	
Reform schools.....			1,668	
Total.....		18,832	1,158,098	

INDUSTRIAL EDUCATION.¹

Three institutions have been added during the year to the list of those aided by the John F. Slater Fund, which now has 44 schools as beneficiaries, two of which are for medical students. The income, \$45,000, is distributed for the most part in sums ranging from \$500 to \$1,000, and in three cases going as high as \$2,000. Of these schools 35 are known to be supported by missionary enterprise, including the work of the Freedman's Aid Society as such.

In another chapter of this volume we have carefully endeavored to distinguish between manual training and industrial training. Now which form of work is obtaining in the case of the colored man? As the trustees of the Slater Fund distribute \$45,000 among a majority of the institutions in the South for the education of the negro, and this distribution is specifically to foster hand training, the opinions of their agent through

¹ See also circular No. 5, 1888, of this Bureau, "Industrial Education in the South," by Rev. A. D. Mayo.

whom the money is distributed and by whom the institutions to be benefited are selected is of considerable importance. He recently said:

"Many things have shown me that some of the best friends and supporters of the schools for negroes in this country look with a degree of apprehension upon the almost universal prevalence of the industrial element in their work. Some fear that the workshop will hinder the recitation room. In the absence of facts, this is perhaps a perfectly natural view that should not be surrendered without evidence that it is ill-founded. For the moment, granting (what is very far from the truth) that the workshop does hinder the school-room and abridge book-learning, there are some very important matters to be considered before deciding that the shop should be closed.

"1. What I do not now dwell upon, the need of more skilled labor among the colored people for their own good and the obvious fact that the industrial departments in these schools afford not only their best, but nearly their only opportunity to learn the use of tools. Practically, the apprentice system is a thing of the past; where it survives, it is impracticable for negroes.

"2. Considering the poverty of these people, unless they are to be absolutely carried by friends, if they are to have the opportunity of learning books, it is needful that they have the opportunity also of earning some money while at school. If there were money enough at the command of these schools to satisfy every poor boy's wants with 'student aid,' this would not meet the case. 'Student aid' may be given—and many times has been given—in such way as to destroy self-reliance. Better have a strong man, ignorant of books but capable of taking care of himself, than a weak man, full of book knowledge who can only live—on other people. 'Student aid' is good when it stimulates effort, or gives a start to a worthy youth; it is a very bad thing when it enervates resolution and breeds dependence. An educated, lazy, incapable negro is a very poor man, for he has tastes that call for hundreds with ability to earn only tens.

"The industrial department in negro schools in the South enables hundreds of students to earn money enough, with what they can make during vacation, to pay their own way. What is here stated is not a theoretical guess; it was found out by the actual test of trial. Before me is the report of a school in which \$1,000 used in running the industrial departments aided effectually a larger number of students than the money divided among them could have kept at school. And the aid was not in the nature of a gift; it was for work done and fairly priced. Such aid builds up manhood within.

"In illustration: Mr. B. T. Washington (himself a colored man, taught at 'Hamp-ton,' and with the Armstrong spirit in him), principal of the State Normal School, Tuskegee, Ala. (the State appropriates \$3,000 per annum), says in his report for 1885: 'Able-bodied young men and women work out on an average \$3 per month on their board bills, leaving only \$5 to be paid in cash. Work is required of all for purposes of discipline and instruction, and of teaching the dignity of labor.'

"In such institutions the students are paid an average of ten cents an hour for their work, the amount being credited on their bills. In Shaw University, Raleigh, N. C., for example, during the school year, 1886-87, there were ninety boys in the carpentry department, each one being required to work forty hours per month; eighty young women were in the dressmaking department, and eighty-one worked one hour each day in the dining-hall and cook-room. During this year Shaw University used as 'student aid' for work done \$800. This institution, while among the best in book-learning, is a hive of industrious people. No man who knows the facts doubts that the industrial departments make education possible to great numbers, and in such way as to cultivate rather than destroy self-reliance.

"Students of negro education and of the questions that go with it will be glad to know what some of the veteran and wise teachers think about this whole matter of hand-training, carried on coincidentally with head and heart training. I introduce here quotations from personal and official statements made to me by some of the most experienced and successful workers in these schools. If anybody knows what is good for negro youth these men and women should know. They do know.

"President W. B. Patterson, of the State Normal University, formerly at Marion, now at Montgomery, Ala., says: 'Instead of losing, as some anticipated, the students have gained in the thoroughness of their literary work. The training of the eye and hand has developed their general intelligence, cultivated their power of observation, and given more precision to their work.'

"Principal Becker, of Benedict Institute (Baptist Home Mission), Columbia, S. C., writing of his industrial departments in their relation to intellectual drill and development, says in his report for 1885-86: 'Those who have had to do with teaching the colored people have found two great difficulties in the way, to wit, sluggish action of the mind and the ease with which they have been discouraged. The aid that has been afforded in quickening the mental energies, by the introduction of the industrial work, could not be believed by those who have not had to do with it as we have. We find the

grade of scholarship growing better in the case of all who have been engaged in the industrial departments. I explain the difference by the fact that they found work they could do, and so, getting the sense of mastery and real power to overcome obstacles, carried it into their literary work.

"Another value of this industrial work has been in the teaching of the economy of time, which lies at the foundation of all other economy. Some who laughed at those who took the work at the opening of the school and spent their odd hours in idleness saw these shoemakers and carpenters doing things utterly impossible to them at the close of the year, and done in time that they had utterly wasted. They also saw the workers able to pay their way for a month or more by the work they did, while they were compelled to go home, for I gave no aid to those who declined to enter the industrial department."

"The method is not alike in all the schools; Principal Becker made entering the industrial department voluntary, as he aided only those who worked—nearly all worked."

"In 1886-87 the industrial departments at Benedict were still more vigorously and successfully pushed. In March, 1887, Principal Becker wrote to me: 'The introduction of the industrial work has changed the whole fibre of our other work. * * * A student who has no interest in the industrial departments is certain to be of no account in any other.'

"President De Forest, Talladega College, Alabama (American Missionary Association), says: 'It is conceded that slavery disgraced and disabled labor, and that freedom was generally regarded as a boon of exemption from work and restraint. Upon his emancipation the negro did not at once perceive that self-control involved self-support, and that self-support involved work and economy. The danger of a little learning, never greater than when a people are emerging from ignorance, may be avoided by vigorous manual and moral training. Any education of the freedman which neglects either his physical or spiritual nature is utterly inadequate. The poverty, waste, and wretchedness so prevalent in a region where all the necessities of life are easily secured make a cogent reason for industrial training; while another and hardly less weighty one is found in the incidental effects of such education in reinforcing the will, in developing perseverance, and even in developing the conscience by making plainly apparent the results of good and bad workmanship.'

"President Braden, Central Tennessee College, Nashville (Freedmen's Aid Society), speaking of the young women of the industrial departments, says: 'I realize more the importance of this work as I learn how close is the connection between comfortable homes and virtuous lives. The young women are more independent, have power of greater usefulness, either as teachers, wives, or mothers.'

"Miss S. B. Packard, principal of Spelman Female Institute, Atlanta, Ga. (Woman's Baptist Home Mission), had in charge for the school year 1886-87, 640 girls and young women. Miss Packard says: 'Instead of losing in intellectual development there is a decided gain in thoroughness because of the industrial work. The training of eye and hand not only increases the power of observation and gives precision to their work, but prepares them for homes of their own.'

"President Price, one of the first men of the negro race in the country, Livingstone College, Salisbury, N. C. (African Methodist Episcopal Zion Church), says: 'I feel that industrial training is imperative at this stage of our development as a race.'

"Such statements by those who are actually in the work of 'uplifting the lately emancipated race,' and who best know the conditions of successful work, might be extended through whole pages of this paper. Christian schools that train heads, hearts, and hands can in the long run solve almost any problem for any race."

This Office sees no change in the character of the instruction given; it appears to be trade, apprentice work, as noticed in the preceding Report, at p. 790.

At Atlanta University 12 forges have been added to the equipment and mechanical drawing and both placed under the charge of a graduate of the School of Technology of Worcester, Mass. The students have fitted up the two rooms as a part of their training. Nearly 120 boys have had instruction in the shop for $1\frac{1}{2}$ hours. A printing press has been given and farm work, cooking, and sewing has been carried on as before.

At Clark University the "Ballard shop" has been completed. The building, costing \$5,500, is 40 by 100 and is built of brick. In the carriage shop wood and iron work, trimming, and painting have been extensively carried on, the net returns for work being for the year about \$2,000. From the work of the nine boys in the harness shop \$350 have been obtained. In the printing shop much job work has been done; in the carpentry shop many pieces of furniture have been made. In sewing and dressmaking 160 girls were taught and some of them fitted for an independent living. "All at Clark," says Agent Haywood, "are more than ever pronounced for industrial training, and the new building is a great gift to a good work."

At Fisk University 15 received instruction in cooking, 16 in nursing, 100 in sewing. It is expected to erect a brick building 40 by 80 next year for young men who desire to receive instruction in tool craft.

At Howard University carpentry is the most largely followed trade; printing, shoe-making, and tailoring are also taught, and sewing to girls.

In fact the industrial departments of these schools, most substantially aided by the Slater Fund, are rapidly preparing to turn out skilful mechanics, as they have been turning out teachers from their literary departments in the past. But in giving this industrial instruction it appears that an educative effect obtains, that the intelligence of the pupil is awakened. The principal of the Benedict Institute, an enthusiast on this subject, speaks with enthusiasm in regard to it: "Before the introduction of this industrial work I confess I had begun to be painfully conscious that there was nothing natural in the work in the classes, only in exceptional cases, but distressingly like perpetual galvanizing or magnetizing of a dead body. It was, apply the battery, apply the battery, until it was distressingly painful. The whole of that has been changed, and the energy of the best educational influences is everywhere stirring and animating all the classes. * * * To put the student down to accurate and thorough work was to utterly derange and discourage him. That facility of discouragement has disappeared from among us, and now, instead of deeming it wholly useless to put a hard task before the students, I defy any one to set them so hard a task within any reasonable hope of attainment that they will not only take hold of it, but rather enjoy it the more as its difficulties become apparent. The sense of personal power developed by this work is to me a wonderful and delightful revelation."

NORMAL SCHOOLS FOR THE COLORED RACE (*Tables 32 and 33*).

ALABAMA.

Central Alabama Normal Institute, Huntsville.
State Industrial School, Huntsville.
Tuskegee State Normal and Industrial School,
Tuskegee.
Emerson Institute, Mobile.

ARKANSAS.

Southland College and Normal Institute, Helena.
Branch Normal College of Arkansas Industrial University, Pine Bluff.

DISTRICT OF COLUMBIA.

Miner Normal School, Washington.

FLORIDA.

State Normal School, Tallahassee.

MISSISSIPPI.

State Normal School, Holly Springs.
Jackson College, Jackson.
Normal Department Tougaloo University, Tougaloo.

MISSOURI.

Lincoln Institute, Jefferson City.

NORTH CAROLINA.

State Colored Normal School, Fayetteville.
State Colored Normal School, Goldsboro.
Plymouth State Normal, Plymouth.

NORTH CAROLINA—continued.

St. Augustine Normal School and Collegiate Institute, Raleigh.
State Normal School, Salisbury.

SOUTH CAROLINA.

Schofield Normal and Industrial School, Aiken.
Avery Normal Institute, Charleston.
Winthrop Training School for Teachers, Columbia.
Brewer Normal School, Greenwood.

TENNESSEE.

Normal Department of Knoxville College, Knoxville.
Le Moyne Normal Institute, Memphis.
Morristown Seminary and Normal Institute, Morristown.

TEXAS.

Prairie View State Normal School, Hempstead.

VIRGINIA.

Hampton Normal and Agricultural Institute, Hampton.
Virginia Normal and Collegiate Institute, Petersburg.

WEST VIRGINIA.

Storer College, Harper's Ferry.

SECONDARY SCHOOLS FOR THE COLORED RACE (*Table 42, Division C*).

ALABAMA.

Trinity School, Athens.
Talladega College, Talladega.

FLORIDA.

Cookman Institute, Jacksonville.
Convent of Mary Immaculate, Key West.
Florida Institute, Live Oak.

GEORGIA.

Spelman Seminary, Atlanta.
Lewis Normal Institute, Macon.

MISSISSIPPI.

Meridian Academy, Meridian.

NORTH CAROLINA.

Friends' Academy, Ashborough.
Bennett Seminary, Greensborough.
Scotia Seminary, Concord (Division A.)

PENNSYLVANIA.

Institute for Colored Youth, Philadelphia.

SOUTH CAROLINA.

Wallingford Academy, Charleston.

TENNESSEE.

Knoxville College, Knoxville.

TEXAS.

Hearne Academy, Hearne.
Bishop College, Marshall.
Wiley University, Marshall.

VIRGINIA.

Hartshorne Memorial College, Richmond (Division A.)

COLLEGES FOR THE COLORED RACE (*Table 49*).

ALABAMA.	LOUISIANA—continued.
Selma University, Selma.	Southern University, New Orleans.
ARKANSAS.	Straight University, New Orleans.
Philander Smith College, Little Rock.	MISSISSIPPI.
DISTRICT OF COLUMBIA.	Rust University, Holly Springs.
Howard University, Washington.	NORTH CAROLINA.
GEORGIA.	Biddle University, Charlotte.
Atlanta University, Atlanta.	Shaw University, Raleigh.
Clark University, Atlanta.	Livingston College, Salisbury.
KENTUCKY.	SOUTH CAROLINA.
Berea College, Berea.	Allen University, Columbia.
LOUISIANA.	TENNESSEE.
Leland University, New Orleans.	Central Tennessee University, Nashville.
New Orleans University, New Orleans.	Fisk University, Nashville.
	Roger Williams University, Nashville.

SCHOOLS OF SCIENCE FOR THE COLORED RACE (*Table 54*).

Alcorn Agricultural and Mechanical College, Rodney, Miss.	Clafin University Agricultural College and Mechanics' Institute, Orangeburg, S. C.
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SCHOOLS OF THEOLOGY FOR THE COLORED RACE (*Table 65*).

ALABAMA.	NORTH CAROLINA.
Theological Department of Selma University, Selma.	Theological Department of Biddle University, Charlotte.
Theological Department of Talladega College, Talladega.	St. Augustine Normal School and Collegiate Institute, Raleigh.
Institute for the Training of Colored Ministers, Tuscaloosa.	Theological Department of Shaw University, Raleigh.
DISTRICT OF COLUMBIA.	Theological Department of Livingston College, Salisbury.
Theological Department of Howard University, Washington.	SOUTH CAROLINA.
Wayland Seminary, Washington.	Benedict Institute, Columbia.
GEORGIA.	Theological Department of Allen University, Columbia.
Theological Department of Atlanta Baptist Seminary, Atlanta.	TENNESSEE.
Gammon School of Theology, Atlanta.	Theological Course in Fisk University, Nashville.
LOUISIANA.	Theological Department of Central Tennessee College, Nashville.
Theological Department of New Orleans University, New Orleans.	Theological Department of Roger Williams University, Nashville.
Theological Department of Leland University, New Orleans.	VIRGINIA.
MARYLAND.	Richmond Theological Seminary, Richmond.
Centenary Biblical Institute, Baltimore.	

SCHOOLS OF LAW FOR THE COLORED RACE (*Table 67*).

Law Department of Howard University, Washington, D. C.	Law Department of Central Tennessee College, Nashville, Tenn.
Law Department of Allen University, Columbia, S. C.	

SCHOOLS OF MEDICINE, DENTISTRY, AND PHARMACY FOR THE COLORED RACE (*Table 69*).

Howard University, Washington, D. C.:	Leonard Medical School, Raleigh, N. C.
Medical Department.	Meharry Medical Department of Central Tennessee College, Nashville, Tenn.
Pharmaceutical Class.	
Dental Class.	

VI.—INDIAN SCHOOLS.

By a recent act Congress has made a radical change in the management of Indian schools supported in whole or in part by the Government. In the absence of a report from the Superintendent of Indian Schools¹, we copy the report of Indian Commissioner Oberly, himself formerly the superintendent of Indian schools. Our examination of the subject in our report of last year, based on the report of the superintendent, amounted practically to a statistical monograph, a study which there is no necessity to repeat now.

THE DUTIES OF THE SUPERINTENDENT OF INDIAN SCHOOLS.

Commissioner Oberly, speaking of the creation of an independent office of Indian schools, observes, and we quote him so fully because his opinion is of much weight by reason of his experience:

"Formerly all school employes, excepting the superintendents of the industrial training schools at Carlisle, Pa.; Lawrence, Kans.; Genoa, Nebr.; Salem (Chemawa), Oregon, and Chillicothe, Ind. T., were appointed by the Commissioner of Indian Affairs, upon nominations made either by Indian agents or by the superintendents of the industrial schools referred to above. But by the act making appropriations for the Indian service, approved June 29, 1888 (section 8), it is provided that the Superintendent of Indian Schools 'shall, subject to the approval of the Secretary of the Interior, employ and discharge superintendents, teachers, and other persons connected with schools wholly supported by the Government.'

"This and other additions that have been made by the current appropriation act to the duties of the Superintendent of Indian Schools has raised certain questions concerning the relations of that officer to this Bureau.

"Heretofore the Bureau of Indian Affairs has had, subject to the supervision of the Secretary of the Interior, authority to do the following things in reference to Indian school matters:

"(1) To disburse all gratuity appropriations made for Indian education and also all Indian treaty education funds. Under this authority the Bureau has purchased clothing and subsistence and all other articles necessary in the management of the schools; has contracted with private institutions for the education of Indian children therein at Government expense; has determined the number of and the compensation that should attach to positions in the schools; has determined questions relating to the establishment of new schools, and the preparation of plans of buildings therefor; has paid all school salaries, and has settled all accounts of officers disbursing school moneys.

"(2) To employ and discharge superintendents and teachers, and any other person connected with the schools, except superintendents of the Indian training schools.

"(3) To make rules and regulations for conducting the schools.

"In short, until July 1, 1888, the Indian school system was, in fact, entirely under the supervision and management of the Bureau of Indian Affairs, and in order to show in what respects this supervision and management has been modified or annulled by the act of June 29, 1888, making appropriations for the Indian service, it will be necessary to give a short review of the legislation regarding the office of Superintendent of Indian Schools prior to that date.

"By the Indian appropriation act of May 17, 1882, the President was authorized to appoint an officer, to be known as the Inspector of Indian Schools, and upon this officer the following duties were imposed:

"(1) To inspect all Indian schools.

"(2) To report a plan for carrying into effect treaty stipulations for the education of Indians, 'with careful estimates of the cost thereof.'

"(3) To report 'a plan and estimates for educating all Indian youth for whom no such provision now exists, and estimates of what sums can be saved from existing expenditures for Indian support by the adoption of such a plan.'

"The appropriation act for the following fiscal year of 1883-84 changed the title of the new office to that of Superintendent of Indian Schools, which title has been continued in all appropriation bills enacted since that time; but until the passage of the act of June 29, 1888, no further reference was made in any law to the duties of the position. And it will be observed that duties 2 and 3, as declared by the act of 1882, were not what might be called continuing duties; they were terminated upon the making of the reports required. So that, after these duties had been done, the only duty of the Superintendent was, until July 1, 1888, the inspection of schools. But his duties were added

¹ Under date of January 16, 1889, the Superintendent, Mr. Albrow, issued a brief report, which contains no statistics, however.

to by section 8 of the appropriation act, which went into effect on that day, and from that date it became his duty—

“(1) To visit all schools where Indian children are taught under authority of the Government, and to make to the Secretary of the Interior certain reports in reference to such schools.

“(2) To ‘employ and discharge superintendents, teachers, and any other persons connected with schools wholly supported by the Government.’

“(3) To make rules and regulations for the conduct of such schools as are wholly supported by the Government.

“By this enlargement of the duties of the Superintendent of Indian Schools, Congress took from the Commissioner of Indian Affairs the authority to appoint and discharge superintendents, teachers, and other school employes and to make rules and regulations for conducting the schools, but left with the officer the duty of disbursing all funds for Indian education—the duty of making all purchases for the schools and all contracts for educating Indian children, or building school-houses, paying school salaries, and settling the accounts of all officers who disburse money for school purposes.

“At first glance this law seems to be comprehensive and far-reaching, but, in my opinion, its scope is restricted, and it does not, in fact, furnish adequate means for the carrying out of its apparent purpose. As stated, the act of June 29 last changed the law then in force in two particulars only—first in the authority to make appointments and dismissals; and, second, in the authority to make school rules and regulations; and it left undisturbed all the official machinery of the Bureau of Indian Affairs for disbursing school moneys, making school contracts, paying school salaries, etc. The responsibility for all such transactions remains with the Commissioner of Indian Affairs; and, necessarily, all the business records pertaining thereto must be embodied in the records of the Indian Office. With all this business, as it occurs, and with the methods of conducting it according to law or precedents having the force of law, the Superintendent of Indian Schools should be thoroughly familiar, so that he can intelligently and efficiently discharge his duties, which, limited as they are, imply and require knowledge of the details of the entire Indian school service; and this knowledge can be obtained in no other way than by visiting the schools, and by supervising, under the Bureau of Indian Affairs, all the matters of Indian education that are considered and determined by that Bureau. In this way the Superintendent might have his restricted duties so enlarged that they would cover the entire subject of Indian education, and his limited official power so increased that it could command all the official machinery of the Indian Bureau in the execution of his decisions upon school matters.

“Upon these considerations I have reached the conclusion that the most natural, economical, and effective administration of Indian school affairs will be secured by enlarging the prerogatives of the Superintendent—

“(1) By placing under his immediate supervision all matters connected with all branches of Indian education, instead of restricting him to two lines of work in connection with but one class of schools; and

“(2) By providing that he shall perform the official functions necessary in the discharge of such enlarged duties through the Bureau of Indian Affairs, under which arrangement the Commissioner of Indian Affairs may place at the disposal of the Superintendent the entire official machinery of the Bureau, by the use of which nearly all the business in relation to Indian schools is, and must be, transacted.

“By this plan the Commissioner and Superintendent would exercise concurrent jurisdiction, so to speak, in Indian school affairs. The Superintendent would practically dominate in all school operations, while the Commissioner would continue to perform, without the embarrassment that would result from divided authority, the duties in relation to Indian educational matters that have been devolved upon him by law and by the Indian treaties.

“I therefore recommend that the above suggestions be adopted, and that rules be made for the purpose of carrying them into effect.”

THE USE OF ENGLISH COMPULSORY.

The other important event in the administration of the Government schools for the education of the Indian is the requirement that the English language be used in them.

The action of the Bureau of Indian Affairs in this matter, it is well known, created considerable opposition on the part of several religious denominations, their opposition being “based upon the assumption,” says the Commissioner, “that it was the intention to forbid the reading of the Bible in the vernacular.” To correct this false impression the Commissioner issued a pamphlet; “but in view,” he says in the report we are using, “of the widespread and apparently deep-seated misunderstanding in regard to the bearing of these orders upon the use of the Bible published in Indian vernaculars, it may

be well to state that it is not the intention of the Indian Bureau to prohibit the reading of the Bible by any Indian in any language, or by anybody to any Indian in any language, or in any Indian vernacular anywhere at any time."

The Commissioner observes, under the title of

THE PLATFORM OF THE MOHONK CONFERENCE:

"Nothing, it is maintained, should be done to impair or weaken any of the agencies at present engaged in the work of Indian education. It is therefore concluded that the contract system ought to be continued until the Government is prepared with adequate buildings and competent teachers to assume the entire work of secular education; but the duty of the Government to undertake the task of furnishing primary and secular education for all Indian children of school age on the reservations under Federal control must be constantly insisted upon. In the language of the platform of the Lake Mohonk Conference, at its sixth annual session, held last October, the Government 'has no right to thrust this burden [of Indian education] upon the pioneer population in the midst of which the Indians happen to be located. It has no right to leave this burden to be carried by the churches and private philanthropic societies which have taken it up only because the necessity was great and the neglect absolute. The cost of education is immeasurably less than the cost of war; the cost of educating the Indian for self-support is less than one-tenth the cost of keeping him in pauperism.'

"With that conference this office is also in full agreement upon the following propositions:

"(1) That Indian education should be compulsory; but on those principles of compulsion which are recognized as legitimate in the free commonwealths of the world, which principles, while they would require the Indian child to receive such education as would fit him for civilized life and self-support therein, would leave with his parents the liberty to choose between the Government and the private school, so long as the private school furnished the elements required by civilized life and conformed to a uniform standard prescribed by the Government and maintained in its own schools.

"(2) That a uniform standard of qualifications should be required of all teachers receiving appointments, and should be enforced by rigid and impartial examinations.

"(3) That the official tenure of the teacher should be permanent, and removals should be made only for inefficiency, incompetency, or other unfitness.

"(4) That the whole educational service should, in the interest of just administration and efficient work, be exempt from those changes and that instability of tenure which appertain to partisan appointments."

SCHOOL BUILDINGS.

The construction put by the Treasury Department upon the clause in the Congressional appropriation bill restricting the price of a school building to \$10,000 has and is working disadvantage to Indian education. The Treasury Department has held that ten thousand dollars is the maximum limit for building and furnishing, and further that no appropriation for building in general can be used to construct an addition to a building which has cost for building and furnishing ten thousand dollars. The Commissioner gives an instance of the working of that Congressional limitation and its construction, as follows:

"It is true that \$10,000 is sufficient to erect suitable school buildings in some localities, but in most localities that amount is entirely inadequate; and this limitation, thus construed, has prevented this Bureau from furnishing suitable and adequate school-building accommodations upon many reservations where they are much needed. For instance, the Ute Indians, on the Uintah Reservation, Utah, have 250 children of school age, and until recently they have sullenly refused to have their children educated. Every effort to induce them to send their children to the school at Grand Junction, Colo., which was established in part for their benefit, has been unsuccessful, and at this time not one Ute child is in attendance thereat. 'We will not,' they said, 'send any of our children away to the Grand Junction or any other school, but we will send all our children to school if a good school is established at our agency.' To test their sincerity, a competent teacher and some school supplies and furnishings were sent to the agency, where there is a school building, but a building that is in every respect unsuited for its purpose. This building can not properly accommodate even 25 pupils; but 36 have been crowded into it. Observing this desire for educational advantages, which patience and hard work on the part of the agent and school superintendent had succeeded in awakening in these non-progressive Indians, and being anxious to give it fair opportunity and scope, plans and specifications were prepared for the erection of a boarding-school building large enough to accommodate 75 children. The plans were for a plain build-

ing, to be erected with all possible economy consistent with stability and comfort. Bids were advertised for, according to law, and the lowest received was \$13,000 in excess of the building limitation of \$10,000. This instance is cited to show how difficult it is, while acting under the restrictions of such a rigid policy of economy, to do prompt and effective work in the pending attempt to educate the rising generation of Indians."

STATISTICS.

"On June 30, 1888, the end of the last fiscal year, the Government was supporting, in whole or in part, 233 Indian schools, of which 126 were boarding and 107 were day schools."

"On June 30, 1887, the end of the preceding fiscal year, there were 227 such schools—117 boarding and 110 day schools."

"It thus appears that during the fiscal year there was an increase of 9 in the number of boarding and a decrease of 3 in the number of day schools, the net increase in the whole number of schools being 6."

"Of the 126 boarding schools, 74 were under direct control of this Bureau, 3 were schools at which pupils had been placed under special appropriations made by Congress, and 49 were being conducted under contract with the Government. Of the day schools, 85 were under direct control of the Bureau and 22 were contract schools."

SCHOOL POPULATION, ATTENDANCE, ETC.

"The schools above referred to were supplied from a school population of, approximately, 40,000 children between six and sixteen years of age."

"The attendance at these schools, the number of pupils whom the school buildings could accommodate, and the cost to the Government of maintaining the schools during the fiscal year 1887-88, are shown in the following table:

TABLE 104.—*Showing Number of Schools, School-house Capacity, Enrolment, Average Attendance, Number of Employés, and Cost during the Fiscal Year ended June 30, 1888.*

Kind of Schools.	No.	Capacity.	Enrolment.	Average Attendance.	No. of Employés.	Cost to Government.
<i>Controlled directly by Indian Bureau.</i>						
Boarding-schools.....	*69	5,372	5,647	4,341	637	\$580,954.29
Day schools.....	85	3,344	3,175	1,929	112	58,162.75
Industrial training schools.....	5	1,500	1,570	1,388	179	235,899.12
Total Government schools.....	159	10,216	10,392	7,658	928	875,016.16
Specially appropriated for.....	3	610	512	478	81	75,278.66
<i>Conducted under contract with Indian Bureau.</i>						
Boarding-schools.....	49	4,207	3,015	2,498	489	244,567.56
Day schools.....	22	1,431	1,293	786	39	14,532.17
Total contract schools.....	71	5,638	4,308	3,284	528	259,119.73
Aggregate.....	233	16,464	15,212	11,420	1,537	1,209,414.55

* Four of these schools (having 22 employés) are managed by religious organizations, and are assisted by the Government, which issues clothing and subsistence to the pupils.

"In the preceding table reference is made to five training schools and to three schools for which special appropriations are annually made. The names and statistics of those schools are as follows:

TABLE 105.—Showing Capacity, Enrolment, Average Attendance, etc., of Training Schools (1) Controlled Directly by Indian Bureau, and (2) Specially Appropriated for.

Name of School.	Location.	Number Pupils.	Rate Per Annum.	Capacity.	No. of Employés.	Enrolment.	Average Attendance.	Cost to Government.
<i>Controlled directly by Indian Bureau.</i>								
Carlisle Training.....	Carlisle, Pa.....		\$167	500	51	585	563	\$81,000.00
Chilocco Training.....	Chilocco, Ind. Ter.....		167	200	27	188	154	25,567.76
Genoa Training.....	Genoa, Nebr.....		167	200	27	190	166	29,750.00
Haskell Institute.....	Lawrence, Kans.....		167	350	39	398	338	65,273.19
Chemawa Training...	Near Salem, Oreg.....		167	250	35	200	167	34,308.17
Total				1,500	179	1,570	1,383	235,899.12
<i>Specially appropriated for.</i>								
Hampton Institute...	Hampton, Va.....	120	167	150	31	126	118	19,641.11
Lincoln Institution...	Philadelphia, Pa...	200	167	260	30	212	200	33,137.55
St. Ignatius Mission...	Flathead, Mont.....	150	150	200	20	174	160	22,500.00
Total		470		610	81	512	478	75,278.66
Aggregate		470		2,110	260	2,082	1,866	311,177.78

"The three schools 'specially appropriated for,' mentioned in Table 105, are not Government schools. They are private institutions, in which Indian children are placed under appropriations annually made by Congress for the education in such schools of a specified number of pupils at a certain rate per capita per annum.

"The enrolment and average attendance at Government and contract schools (including the three schools specially appropriated for) during the fiscal years 1886-'87 and 1887-'88, respectively, and the increase in enrolment and in attendance during 1888, as compared with 1887, was as follows:

TABLE 106.—Showing Increase of School Enrolment and Average Attendance during the Fiscal Year 1887-'88 over the Fiscal Year 1886-'87.

Kind of School.	Enrolled.		Increase.	Average Attendance.		Increase.
	1886-'87.	1887-'88.		1886-'87.	1887-'88.	
Government:						
Boarding	7,621	7,729	108	5,939	6,207	263
Day	3,115	3,175	60	1,896	1,929	33
Total	10,736	10,904	168	7,835	8,136	301
Contract:						
Boarding	2,553	3,015	462	2,081	2,493	417
Day	1,044	1,293	249	604	786	182
Total	3,597	4,308	711	2,685	3,284	599
Aggregate.....	14,333	15,212	879	10,520	11,420	900

"In this connection, the following comparative statement, showing the attendance at Indian schools during the past six years, is made: "

TABLE 107.—*Showing Indian-School Attendance from 1882 to 1888, both Years Included.*

Year.	Boarding-schools.		Day Schools.	
	Number.	Average Attendance.	Number.	Average Attendance.
1882.....	71	2,755	54	1,311
1883.....	78	2,599	64	1,443
1884.....	86	4,353	76	1,757
1885.....	114	6,201	86	1,942
1886.....	115	7,260	99	2,370
1887.....	117	8,020	110	2,500
1888.....	126	8,705	107	2,715

EMPLOYÉS AT INDIAN SCHOOLS.

"In the management of the schools controlled directly by this Bureau there were employed 757 white persons and 137 Indians—in all, 894 regular employées—as follows: "

TABLE 108.—*Showing the Positions and Number of White and Indian Employées in the Indian School Service during the Fiscal Year Ended June 30, 1888.*

Positions.	Whites.	Indians.	Positions.	Whites.	Indians.
Superintendents.....	13	.....	Agent for out pupils.....	1	.....
Assistant superintendent.....	1	.....	Dairy manager.....	1	.....
Superintendents and principal teachers.....	55	.....	Farmers.....	7	.....
Superintendents for day schools.....	2	.....	Assistant farmers.....	.....	2
Disciplinarians.....	3	2	Assistant farmer and gardener.....	1	.....
Teachers.....	241	.....	Gardener.....	1	.....
Assistant teachers.....	.....	7	Engineers.....	5	.....
Industrial teachers.....	63	.....	Carpenters.....	13	.....
Assistant industrial teachers.....	.....	5	Wagon-makers.....	2	.....
Mechanical teacher.....	1	.....	Tinners.....	2	.....
Matrons.....	82	.....	Shoemakers.....	6	1
Assistant matrons.....	.....	7	Shoe and harness makers.....	5	.....
Seamstresses.....	63	2	Harness-makers.....	4	1
Assistant seamstresses.....	.....	10	Tailors.....	7	1
Cooks.....	63	4	Painter.....	1	.....
Assistant cooks.....	1	10	Printer.....	.....	1
Laundresses.....	53	8	Blacksmiths.....	2	.....
Assistant laundresses.....	1	7	Blacksmith and wheelwright.....	1	.....
Physicians.....	6	.....	Blacksmith and wagon-maker.....	1	.....
Clerks.....	9	.....	Store-keepers.....	2	2
Clerks and physicians.....	5	.....	Watchmen.....	2	10
Teachers and seamstresses.....	2	.....	Apprentices.....	.....	15
Assistant teacher and seamstress.....	1	.....	Janitor.....	.....	1
Assistant teachers and matrons.....	5	.....	Hospital steward.....	.....	1
Matrons and seamstresses.....	5	.....	Cadet-sergeants.....	.....	10
Cooks and laundresses.....	7	.....	Herders.....	.....	2
Nurses.....	4	.....	Helpers.....	.....	7
Bankers.....	7	4	Laborers.....	.....	6
Butchers.....	.....	2	Total by race.....	757	137
			Total.....	(894)	

"In addition to the regular employées above enumerated a large number of persons are irregularly employed in connection with the schools. The great majority of these irregular employées are Indian pupils engaged in learning trades, to each of whom a few cents a day are paid. These payments are justified by the fact that the pupils work more willingly and industriously and learn more rapidly under the incentive of small wages than they would if they were not thus recompensed for their labor; and, moreover, they thus learn the value of small earnings and small savings."

CHAPTER XVIII.

EDUCATIONAL PERIODICALS.

The following list of educational periodicals represents such as are on 'file in the library of the Office, and such as are found useful in making up the annual report. Some in the list, no doubt, have suspended publication. There is no way at the disposal of the Office of finding out when many of these periodicals began or when they ceased publication.

The table is intended to give a brief description of these publications.

TABLE 109.—Statistics of Educa

	Place of Publication.	Principal Title.	Name of Editor.
	1	2	3
	I.—UNITED STATES.		
1	Birmingham, Ala.....	Southern Journal of Education...	H. P. Burruss
2	Collinsville, Ala.....	Educational Advocate.....	Douglas Allen.....
3	Huntsville, Ala.....	Alabama Teachers' Journal.....	J. A. B. Lovett
4	Huntsville, Ala.....	Normal Index	State Normal School.....
5	Tuskegee, Ala.....	Southern Letter	Booker T. Washington.....
6	Sitka, Alaska.....	The Alaskan.....	Maurice E. Kenealy.....
7	Sitka, Alaska.....	The North Star.....	Jackson and Kelly.....
8	Little Rock, Ark.....	Arkansas Teacher	Josiah H. Shinn
9	Marysville, Cal.....	The Budget.....	F. S. Carr.....
10	San Francisco, Cal.....	Pacific Educational Journal.....	J. B. McChesney.....
11	San Francisco, Cal.....	Pacific School Journal.....	Albert Lyser.....
12	Denver, Colo.....	Colorado School Journal.....	Aaron Gove
13	Hartford, Conn.....	American Journal of Education...	Henry Barnard.....
14	Blunt, Dak.....	Dakota School Journal.....	Henry Hoffman
15	Grand Forks, Dak.....	Educational News.....	A. R. Griffith.....
16	Grand Forks, Dak.....	The Student.....	Students of the University.....
17	Bloomington, Ill.....	Illinois School Journal.....	George P. Brown
18	Chicago, Ill.....	County School Council.....	W. McCollum.....
19	Chicago, Ill.....	Intelligence.....	E. O. Vaile
20	Springfield and Peoria, Ill.....	National Educator	Jeriah Bonham.....
21	Taylorville, Ill.....	Christian County School News.....	C. M. Parker
22	Indianapolis, Ind.....	Educational Weekly	J. M. Olcott
23	Indianapolis, Ind.....	Indiana School Journal.....	W. A. Bell.....
24	Mitchell, Ind.....	Normal Quarterly.....	Lugenbeel and Sutherland.....
25	Algona, Iowa.....	Normal Herald.....	Students Normal School.....
26	Des Moines, Iowa.....	North-Western Journal of Education.	Ella A. Hamilton.....
27	Dubuque, Iowa.....	Normal Monthly.....	George W. Jones
28	Keokuk, Iowa.....	Central School Journal.....	Howell and Marshall.....
29	Wilton Junction, Iowa.....	The Normal.....	Brower and Parsons.....
30	Lincoln and Topeka, Kans.....	Western School Journal.....	R. W. Turner
31	Louisville, Ky.....	Educational Courant.....	R. H. Carothers
32	New Orleans, La.....	Journal of Education.....	W. O. Rogers.....
33	New Orleans, La.....	Progressive Teacher.....	Mrs. M. J. Williams
34	Baltimore, Md.....	The Educator.....	Centenary Biblical Institute.....
35	Boston, Mass.....	American Teacher.....	Winship and Sheldon.....
36	Boston, Mass., and London, Eng.....	Common School Educator.....	William A. Mowry
37	Boston, Mass.....	Education	William A. Mowry
38	Boston, Mass., and Chicago, Ill.....	N. E. Journal of Education.....	A. E. Winship.....
39	Boston, Mass.....	Popular Educator	Educational Publishing Co
40	South Lancaster, Mass.....	True Educator.....	Charles C. Ramsey
41	Fenton, Mich.....	Normal Adviser.....	J. M. Pile
42	Lansing, Mich.....	School Moderator.....	Henry R. Pattengill
43	Minneapolis, Minn.....	School Education.....	Sanford Niles.....
44	Meridian, Miss.....	Mississippi Teacher.....	Kincannon and Deupree.....
45	Jefferson City, Mo.....	Missouri School Journal.....	H. A. Gass
46	St. Louis, Mo.....	American Journal of Education.....	J. B. Merwin.....
47	St. Louis, Mo.....	Evangelisch-Lutherisches Schulblatt.	Deutsche Ev.-Luth. Synode von Missouri, Ohio, und andere Staaten.
48	Omaha, Nebr.....	Nebraska Mute Journal.....	Institution for Deaf-Mutes.....
49	Santee Agency, Nebr.....	Word Carrier.....	Alfred L. Riggs.....
50	Manchester, N. H.....	Notes and Queries.....	S. C. and L. M. Gould.....
51	Frenton, N. J.....	The Signal.....	Francis B. Lee.....
52	Albuquerque, N. Mex.....	New Mexico Advertiser.....	Almon F. Hoyt.....
53	New York, N. Y.....	Deaf-Mutes' Journal.....	A. E. Hodgson.....
54	New York, N. Y.....	Penman's Journal.....	D. T. Ames.....
55	New York, N. Y.....	School Gazetteer.....	Writers' Publishing Company.....
56	New York, N. Y., and Chicago, Ill.....	School Journal.....	Kellogg and Allen.....

tional Periodicals for 1887-88.

Date of First Issue.	No. of Volume in June, 1888.	When Such Volume Began.	No. of Volumes in Year.	How Often Published.	Price Per Annum.	Remarks.	
4	5	6	7	8	9	10	
Mar., 1885			1	M.	\$1.00		1
—, 1887			1	M.	.50		2
July, 1885	3	July	1	M.	1.00		3
Dec., 1885	2	July	1	W.	1.00		4
	5	May	1	M.			5
—, 1886	3	Dec.	1	W.	3.00		6
Dec., 1887	1	Dec.	1	M.	.50		7
Jan., 1884			1	M.	1.00		8
May, 1887	2	Jan.	1	M.	1.25		9
Feb., 1887	3	Feb.	1	M.	2.00		10
Mar., 1877			1	M.	2.00	Suspended.	11
May, 1885	4	May	1	M.	1.50		12
Aug., 1885			1	Q.	4.00		13
Jan., 1885			1	M.	1.00	Suspended.	14
Oct., 1886			1	M.	.50		15
Apr., 1888		Apr.	1	M.	1.00		16
Jan., 1881	7	Sept.	1	M.	1.25		17
July, 1887	1	July	1	M.	1.25		18
Jan., 1881	8	Jan.	1	Semi-mo.	1.50	As School-master to June, 1884, when it took the present title.	19
Jan., 1884	4	Jan.	1	M.	1.00		20
June, 1887	2	June	1	M.	.50		21
July, 1883			2	W.	2.00	November 12, 1883, united with N. E. Journal of Education.	22
Jan., 1856	33	Jan.	1	M.	1.50		23
—, 1882			1	Q.	.25		24
June, 1887	2	June	1	M.			25
—, 1885			2	W.	2.00		26
Aug., 1887	11	Aug.	1	M.	1.50		27
—, 1876	11	Aug.	1	M.	.75		28
May, 1888	1	May	1	M.			29
Feb., 1885	4	Dec.	1	M.	1.00	Successor to Educationist.	30
June, 1884	5	June	1	M.	1.00		31
Apr., 1879	10	Mar.	1	M.	1.50		32
Feb., 1886	3	Feb.	1	M.	.50		33
Oct., 1886	2	Oct.	1	M.	.60		34
Sept., 1883	5	Sept.	1	M.	1.00	Ten numbers in volume	35
Jan., 1887	2	Jan.	1	M.	1.00		36
Sept., 1880	8	Sept.	1	M.	3.00	Bi-monthly till Jan., 1886.	37
Jan., 1875	27	Jan.	2	W.	2.50	Consolidation of Massachusetts Teacher, Rhode Island School-master, Common School Journal, and College Courant.	38
—, 1884	4	Jan.	1	M.	1.00		39
Apr., 1884	4	Sept.	1	M.	.75		40
Jan., 1888	1	Jan.	1	M.	.40		41
Sept., 1880	8	Sept.	1	Semi-mo.	3.00	Weekly till end of vol. 5	42
Dec., 1881	7	Jan.	1	M.	1.00		43
Nov., 1887	1	Nov.	1	M.	1.00		44
Oct., 1883	1 (n. s.)	Jan.	1	M.	1.25		45
	21	Jan.	1	M.	1.00		46
			1	Q.	1.00		47
Mar., 1883	15	Jan.	1	Semi-mo.	.75	Ten numbers in volume	48
July, 1882	5 (n. s.)	Jan.	1	M.	.50		49
Dec., 1885	5	Jan.	1	M.	1.00		50
Jan., 1888	3	Nov.	1	M.	.60	School year	51
	1	Jan.	1	M.	.50		52
	17	Jan.	1	W.	1.50		53
	12	Jan.	1	M.	1.00		54
Oct., 1886	2	Oct.	1	Q.	.50		55
—, 1871	35	Jan.	2	W.	2.50		56

a The price given is the annual subscription in the country where published.

TABLE 109.—*Statistics of Educa*

	Place of Publication.	Principal Title.	Name of Editor.
	1	2	3
	I.—UNITED STATES— continued.		
57	New York, N. Y., and Chicago, Ill.	Teachers' Institute	Kellogg and Allen
58	New York, N. Y.	Words and Weapons	George F. Pentecost
59	Rochester, N. Y.	Educational Gazette	Alvin P. Chapin
60	Syracuse, N. Y.	The Academy	George A. Bacon
61	Syracuse, N. Y.	The School Bulletin	C. W. Bardeen
62	Raleigh, N. C.	North Carolina Teacher	Eugene G. Harrell
63	Wilmington, N. C.	The Lighthouse	Tiliston Normal School
64	Akron, Ohio	Ohio Educational Monthly	Samuel Findley
65	Athens, Ohio	Journal of Pedagogy	J. P. Gordy
66	Cincinnati, Ohio	The Chautauqua	Gillet and Shearer
67	Columbus, Ohio	The Mute's Chronicle	Ohio Institute for Deaf-Mutes
68	Findlay, Ohio	The Educational Leader	Woollington & Co.
69	Mt. Washington, Ohio ..	Public School Journal	Public School Journal Company ..
70	Allentown, Pa.	National Educator	A. R. Horne
71	Germantown, Pa.	The Student	Garrett and Cox
72	Lancaster, Pa.	Pennsylvania School Journal	E. E. Higbee
73	Meadville, Pa.	The Chautauquan	Theo. F. Flood ..
74	Millersville, Pa.	The Normal Journal	E. Oram Lyte
75	Philadelphia, Pa.	Educational News	Educational News Company ..
76	Philadelphia, Pa.	The Indicator	R. Morris Smith
77	Philadelphia, Pa.	The Teacher	Eldridge Brothers
78	York, Pa.	The Fountain	W. H. Shelley
79	Columbia, S. C.	Carolina Teacher	W. L. Bell
80	Chattanooga, Tenn.	The Educator	Jeremiah Behm
81	Hollow Rock, Tenn.	Southern Teacher	Jos. J. Losier ..
82	Nashville, Tenn.	Good Education	Price and Goodman
83	Nashville, Tenn.	Southern Normalist	J. C. Shirley
84	Nashville, Tenn.	South-Western Journal of Edu- cation	Garrett & Lampson
85	Austin, Tex.	Texas School Journal	O. H. Cooper
86	Brattleborough, Vt.	Woman's Magazine	Esther T. House
87	Alexandria, Va.	Academy Journal	St. John's Academy
88	Hampton, Va.	Southern Workman	Armstrong, Ludlow, & Arm- strong ..
89	Richmond, Va.	Educational Journal of Virginia ..	William F. Fox
90	Morgantown, W. Va.	West Virginia School Journal	Benjamin S. Morgan
91	Madison, Wis.	Wisconsin Journal of Education ..	J. W. Stearns
92	Milwaukee, Wis.	Erziehungs-Blätter	Maximilian Grossmann
93	Washington, D. C.	American Annals of the Deaf	E. A. Fay
94	Dayton, W. T.	The School Journal	F. M. McCully
95	Olympia, W. T.	The North-West Teacher	L. E. Tollansbee
	II.—BRITISH EMPIRE.		
96	Montreal, Canada	Educational Record of the Prov- ince of Quebec .....	.....
97	Toronto, Canada	Canada School Journal .....	.....
98	London, England	Educational Times	Organ of College of Precceptors ..
99	London, England	Educational Record	Organ of British and Foreign School Society ..
100	London, England	Journal of Education .....	.....
101	London, England	Quarterly Circular	Organ of National Union of Ele- mentary Teachers ..
102	London, England	School Board Chronicle	Organ for the School Boards
103	London, England	Indian Magazine	Organ of National Indian Asso- ciation ..
104	London, England	The School-master .....	.....
105	Christ Church, New Zealand ..	New Zealand School-master .....	.....
106	Edinburgh, Scotland ..	Educational News	Organ of the Educational Insti- tute of Scotland ..

tional Periodicals for 1887-88—Continued.

Date of First Issue.	No. of Volume in June, 1888.	When Such Volume Began.	No. of Volumes in Year.	How Often Published.	Price Per Annum. ^a	Remarks.	
4	5	6	7	8	9	10	
.....	10	Sept....	1	M	1.00	In October, 1885, Practical Teacher and Teachers' Institute united; ten numbers in volume.	57
—, 1885	4	Jan....	1	M	1.50	.....	58
Jan., 1885	4	Jan....	1	M	1.00	Ten numbers in volume	59
Feb., 1886	3	Feb ...	1	M	1.00	Ten numbers in volume	60
Sept., 1874	14	Sept....	1	M	1.00	.....	61
June, 1883	5	Sept....	1	M	1.00	.....	62
Jan., 1881	.....	.....	1	M .....	.....	.....	63
Jan., 1860	37	Jan....	1	M	1.50	Ohio Journal of Education, vols. 1-8 (1852-59). Ohio Educational Monthly and National Teacher, vols. 9-24 o.s. (1860-75); 1-16 n.s. (1860-75); 1-7 3d s. (1876-82); 25-36 o.s. (1876-87).	64
Sept., 1887	1	Sept....	1	M	1.00	.....	65
Jan., 1886	3	Mar....	1	M .....	.50	.....	66
.....	20	Sept....	1	W	1.00	Successor to Vis-à-Vis.....	67
Nov., 1886	.....	.....	1	M .....	.50	.....	68
.....	23	Jan....	2	M	1.00	.....	69
—, 1860	29	Apr ...	1	Semi-mo..	.75	.....	70
Sept., 1880	8	Oct....	1	M	1.00	Eleven numbers in volume	71
Jan., 1882	36	July ...	1	M	1.60	.....	72
Oct., 1881	8	Oct....	1	M	1.50	.....	73
Nov., 1887	1	Nov ...	1	M .....	.....	.....	74
.....	4	Jan....	1	W	1.50	.....	75
Sept., 1881	7	Oct....	1	M .....	.50	School Year.....	76
.....	.....	.....	1	M .....	.50	.....	77
Sept., 1883	5	Sept....	1	M	1.00	Ten numbers in volume.....	78
Jan., 1885	4	Jan....	1	M	1.25	.....	79
Feb., 1885	.....	.....	1	M .....	.50	Suspended.....	80
Dec., 1882	.....	.....	1	M .....	.50	.....	81
June, 1887	2	June....	1	M .....	.30	.....	82
May, 1884	.....	.....	1	M	1.00	.....	83
Mar., 1883	6	Mar ...	1	M	1.00	.....	84
Jan., 1883	6	Jan....	1	M	1.50	.....	85
.....	11	Sept....	1	M	1.00	.....	86
—, 1872	19	Oct....	1	M .....	.25	.....	87
.....	17	Jan....	1	M	1.00	.....	88
Jan., 1870	19	Jan....	1	M	1.00	.....	89
Nov., 1881	7	Jan....	1	M	1.00	.....	90
Apr., 1871	18	Jan....	1	M	1.00	.....	91
.....	17	Oct....	1	M	2.12	.....	92
—, 1848	33	Jan....	1	Q	2.60	.....	93
Apr., 1884	.....	.....	1	M	1.50	.....	94
Oct., 1886	2	Oct....	1	M	1.00	.....	95
Jan., 1881	8	Jan....	1	M	1.00	.....	96
Jan., 1885	4	Jan....	1	Semi-mo..	2.00	.....	97
.....	41	Jan....	1	M	7s. 0d.	.....	98
.....	14	Oct....	1	Q	7s. 8d.	.....	99
Jan., 1879	10	Jan....	1	M	6s. 6d.	.....	100
Oct., 1886	2	Oct....	.....	Q	6d.	.....	101
Jan., 1871	38	Jan....	2	W	15s. 0d.	.....	102
.....	18	Jan....	1	M	5s. 0d.	Successor to Journal of National Indian Association.	103
Jan., 1872	32	Jan....	2	W	4s. 4d.	.....	104
.....	7	Aug ...	1	M	6s. 6d.	.....	105
Jan., 1876	18	Jan....	1	W	6s. 6d.	.....	106

^a The price given is the annual subscription in the country where published.

TABLE 109.—Statistics of Educa

	Place of Publication.	Principal Title.	Name of Editor.
	1	2	3
	III.—OTHER FOREIGN.		
107	Vienna, Austria.....	Freie pädagogische Blätter	A. Chr. Jessen
108	Vienna, Austria.....	Oesterreichischer Schulbote.....	F. Frisch-Klagenfurt.....
109	Brussels, Belgium	Bulletin du Ministère de l'Intérieur et de l'Instruction Publique.	Ministère de l'Intérieur et de l'Instruction Publique.
110	Brussels, Belgium	Magasin des Jeux et Travaux Instructionnels pour Garçons et Fillettes.	Tedesco Frères (Bruxelles, Paris, Genève),
111	Brussels, Belgium	L'Abeille.....	Th. Braun.....
112	Brussels, Belgium	L'Ecole Libre	La Fraternelle
113	Brussels, Belgium	Le Progrès.....	Société Centrale des Instituteurs Belges.
114	Copenhagen, Denmark	Vor Ungdom	H. Trier and P. Voss
115	Bordeaux, France	Le Moniteur du Jeune Âge.....	Mme. Bellier (Marie Klecker).....
116	Paris, France	Bulletin Administratif du Ministère de l'Instruction Publique.	Ministère de l'Instruction Publique.
117	Paris, France	Journal d'Education Populaire.....	Société pour l'Instruction Élémentaire.
118	Paris, France	L'Éducation Nationale.....	Aleide Picard and Kaan.....
119	Paris, France	L'Instituteur	A. Vessiot
120	Paris, France	L'Instruction Publique.....	J. Guieu
121	Paris, France	Manuel Général de l'Instruction Primaire.	Ch. Defodon.....
122	Paris, France	Recueil des Lois et Actes de l'Instruction Publique.	.....
123	Paris, France	Revue Internationale de l'Enseignement.	Edmond Dreyfus-Brisac
124	Paris, France	Revue Pédagogique	Musée Pédagogique
125	Berlin, Germany.....	Centralblatt.....	Ministerium der geistlichen Unterrichts und Medizinal-Angelegenheiten.
126	Cassel, Germany.....	Erziehung der Gegenwart	G. Wittmer.....
127	Gera and Leipzig, Germany.	Die Lehrerin in Schule und Haus.	Marie Loeper-Housselle
128	Gotha, Germany.....	Pädagogische Blätter	G. Schöppe
129	Leipzig, Germany.....	Allgemeine Deutsche Lehrerzeitung.	Moritz Kleinert.....
130	Leipzig, Germany.....	Paedagogium.....	Friedrich Dittes.....
131	Leipzig, Germany.....	Zeitung für das höhere Unterrichtswesen.	H. A. Weiske
132	Munich, Germany.....	Knabenhort	Society of same name
133	Rome, Italy	Bollettino Ufficiale	Ministero della Pubblica Istruzione.
134	Rome, Italy	Il Nuovo Educatore.....	G. B. Paravia e Comp
135	Amsterdam, Netherlands.	Het Nieuwe Schoolblad	J. Versluys
136	Madrid, Spain.....	Boletín de la Institución Libre de Enseñanza.	Institución Libre de Enseñanza ..
137	Berne, Switzerland.....	Der Pionier .....	.....
138	Frauenfeld, Switzerland.	Schweizerische Lehrerzeitung.....	H. Wettstein und H. R. Rüegg.....
139	Solothurn, Switzerland	Der Fortbildungsschüler.....	Solothurn Lehrmittelkommission.
140	Zurich, Switzerland	Schweizerisches Schularchiv.....	Hunziker, Schurter, und Stifel....
	CENTRAL AMERICA.		
141	San José, Costa Rica.....	El Maestro.....	Pio Viquez.....
142	San José, Costa Rica.....	La Enseñanza	Juan F. Ferraz, director.....
	SOUTH AMERICA.		
143	Buenos Ayres, Argentine Republic.	El Monitor de la Educacion Comun.	Comision Nacional de Educacion

tional Periodicals for 1887-88—Continued.

Date of First Issue.	No. of Volume in June, 1888.	When Such Volume Began.	No. of Volumes in Year.	How Often Published.	Price Per Annum. <i>a</i>	Remarks.	
4	5	6	7	8	9	10	
Jan. 1, 1867	22 year	Jan.....	1	W.....	10 mk.		107
	38 year	Jan.....	1	Semi-mo..	4 fl.		108
	5 year						109
Oct. 1, 1882	7th series	Oct.....		M.....	20 fr.	Established in 1882 as Journal Froebel des Écoles Belges, then changed in 1884 to Journal des Jeux et Ouvrages. In 1887 changed to Magasin des Jeux, etc. In 1888 transferred to Paris and issued in separate numbers entitled Journal des Petites Filles and Journal des Petits Garçons.	110
—, 1855	34 year	Mar....	1	M.....	6 fr.		111
Jan. 1, 1861	2 year	Jan.....	1	W.....	6 fr.		112
	28 year	Jan.....	1	W.....	5.26 fr.	Publication ceased in Jan., 1888.	113
			1	Bi-mo.....	6 crowns		114
Jan. 1, 1880	9 year	Jan.....	1	Semi-mo..	8 fr.		115
—, 1850	42 vol.	Jan & July.	2	W.....	5 fr.		116
—, 1815	73 year	Jan.....	1		5 fr.	Appears every two or three months.	117
Jan. 1, 1887	2 year	Jan.....	1	W.....	6 fr.		118
Oct. 20, 1886	2 year	Oct.....	1	M.....	6.50 fr.		119
—, 1872	17 year	Jan.....	1	W.....	18 fr.		120
Nov., 1832	24th vol., 5th series.	Jan.....	1	W.....	6 fr.		121
—, 1847	41 year	Jan.....	1	W.....	6 fr.		122
Jan. 1, 1881	8 year	Jan & July.	2	M.....	24 fr.		123
—, 1878	12 vol.(n.s.)	Jan & July.	2	M.....	12 fr.		124
		Jan.....	1	M.....	7 mk.		125
	16 year	Jan.....	1	M.....	4 mk.		126
Oct., 1884	4 year	Oct....	1	Semi-mo..	5 mk.		127
—, 1872	17 vol.	Jan.....	1	Bi-mo.....			128
Jan. 1, 1846	40 year	Jan.....	1	W.....	8 mk.		129
Oct. 1, 1878	10 year	Oct....	1	M.....	9 mk.		130
	17 year	Jan.....	1	W.....	8 mk.		131
—, 1883	6 year	Jan.....	1	M.....	3.60 mk.		132
—, 1874	14 vol.	Jan.....	1	M.....			133
	8 year	Oct.....	1	W.....	6 lire		134
	6 year	Jan.....	1	W.....	6 fl.		135
—, 1877	12 year	Jan.....	1	Semi-mo..	10 pesetas		136
Jan. 1, 1880	9 year	Jan.....	1	M.....	1.50 fr.		137
Jan. 1, 1856	33 year	Jan.....	1	W.....	5 fr.		138
	8 year				1 fr.	Ten numbers each winter.....	139
Jan. 1, 1880	9 vol.	Jan.....	1	M.....	2 fr.		140
Sept. 15, 1835	3 year		1	Semi-mo..	\$4.00		141
—, 1872	3 vol.			M.....	\$3.00		142
Sept., 1881	9 year			M.....			143

a The price given is the annual subscription in the country where published.

CHAPTER XIX.

EDUCATION IN FOREIGN COUNTRIES.

STATISTICS OF ELEMENTARY EDUCATION IN FOREIGN COUNTRIES.

[Table 110.]

Table 110 presents the principal statistics relating to elementary education in foreign countries whose reports have been received at this Office. As few countries report their school population, the total populations have been given in Column 2, Part I, of the table, as a basis for comparing school enrolment.

Where the latest census antedates by several years the year of the school report, estimates of the total population for a nearer date have been employed when attainable. The fact is indicated by a foot-note. Such estimates have been taken from the educational reports, or from the Statesman's Year-Book for 1887.

The school ages reported from 35 countries range from 5 to 21 years. From an inspection of Column 3, Part II, it will be seen that seven countries report a longer period than 9 years, while nine report a shorter period than 8 years. The average period is 8.2 years. The statistics of school population and enrolment in Hungary include the youth 6 to 15 years of age, which are accordingly given as the limits of the school age. In fact, attendance upon elementary schools in Hungary is obligatory from 6 to 12 years of age, inclusive, and upon the "review" or "continuation" schools from 12 to 15 years. The latter may be day, evening, or Sabbath schools. In them the branches pursued in the ordinary elementary schools are reviewed, and somewhat extended. The school age in Bavaria includes also 3 years in the review schools.

In England and Scotland it is customary to include only six-sevenths of the population in estimating the number of children for whom provision should be made in State-aided elementary schools. As the omission of one-seventh of the population in these estimates is misleading when the statistics are tabulated with those of other countries, the numbers showing the entire child population as given in the official reports from those countries are used in this table.

It will be observed that the school population of England and Wales is given for the years 5 to 14, and also 3 to 14; the former is the obligatory school period. Children are, however, admitted at 3 years of age, and the enrolment includes pupils as young as that, together with a small number above 14 years of age.

In the case of Finland the enrolment includes pupils in infant schools.

The ratios of school enrolment to total population, and to school population when reported, are shown in Table 111.

Care has been taken to confine the table to the statistics of elementary schools; *i. e.*, schools below the high school grade, which is substantially the same for all countries. In a very few instances the distinction is not clearly preserved in the original reports, and the totals of enrolment and teachers possibly include high schools. It is certain, however, that in these cases, which are few, the totals are not greatly affected thereby.

A glance at the columns setting forth the number of schools and the school enrolment will show that the word "school," or its foreign equivalent, has various applications. It sometimes signifies the scholars in charge of one teacher, and sometimes a collection of such bodies forming a series of grades in one building.

In the case of Württemberg, the number of teachers' positions is given in Column 12, the number of teachers employed not being reported. Pupil teachers are a feature of the school systems of England and Wales, Scotland, New South Wales, and Japan, and are included in the totals of teachers for the three former countries. The teaching force reported for Ireland includes 665 work mistresses and temporary assistants.

The expenditures reported include as a rule teachers' salaries and cost of supervision and administration.

For Saxony the amount includes expenditures for 1,892 Fortbildungsschulen and two schools for deaf-mutes; for England and Wales and Scotland the cost of night schools is included; and for Ireland and Jamaica the amount is the reported income of the schools, which is presumably equivalent to the expenditure.

In the following countries represented in the table, the elementary schools are free schools: France, Italy, Switzerland, Algeria, British Columbia, Manitoba, New Brunswick, Nova Scotia, Ontario, Prince Edward Island, Costa Rica, Guatemala, Argentine Republic, Chili, Victoria, Queensland, and New Zealand. In these the cost of elementary education is defrayed by State and local funds. The Prussian constitution of 1850 declared that instruction should be gratuitous in the elementary schools, but the provision has not been carried into effect for want of means. For the accomplishment of this purpose a bill was introduced into the Landtag in January, 1888, calling for an appropriation equivalent to five million dollars. The bill passed and was one of the last acts signed by the Emperor Frederick. After October 1, 1888, the collection of fees will cease and the elementary schools will be free.

In Venezuela the law provides for free schools, but this provision does not appear to have been carried into effect. In the remaining countries a portion of the cost is met by tuition fees.

In addition to the tabulated statistics of elementary instruction in France the official report gives a total of 6,090 maternal schools, enrolling 761,692 pupils and employing 9,219 teachers. The number of pupils in superior primary schools or complementary courses was 38,776 (viz, 27,295 boys and 11,481 girls).

In Table 110, Part I, Mons. Berthelot is given as the minister of public instruction in France. This gentleman was succeeded by Mons. Spuller, December 12, 1887, who gave way January 1, 1888, to Mons. Léopold Faye. The term of service of the last-named terminated April 3, at which date Mons. Edouard Lockroy was appointed.

TABLE 110.—*Comparative Statistics of Elementary Education in Foreign Countries.*—PART I.

Countries.	Population.		Population to Square Mile.	Name and Title of Chief Officer of Education.
	Number.	Date.		
I	2	3	4	5
Austria-Hungary:				
Austria.....	23,070,683	1886	199.00	Dr. Gautsch von Frankenthurn, minister of public instruction and ecclesiastical affairs.
Hungary.....	16,570,140	1886	132.51	Dr. August Trefort, minister of public instruction and ecclesiastical affairs.
Belgium.....	65,883,278	1886	519.65	Monsieur Thonissen, minister of the interior and of public instruction.
France.....	38,218,903	1886	187.00	Monsieur Berthelot, minister of public instruction.
Germany:				
Prussia.....	27,279,111	1880	199.00	Dr. Von Gossler, minister of ecclesiastical affairs, of public instruction, and of medical affairs.
Württemberg.....	1,995,168	1885	260.00	Dr. Von Slicher, ministerial director and president of the department of ecclesiastical affairs and public instruction.
Bavaria.....	5,420,199	Dec. 1, 1885	185.00	Baron J. de Lutz, president of the council, minister of the interior, of ecclesiastical affairs, and of public instruction.
Saxony.....	3,179,168	1885	469.00	Dr. G. F. W. von Gerber, minister of state and chief of the department of ecclesiastical affairs and public instruction.
Hamburg (free city).....	518,620	1885	3,504.00	Director, F. F. Petzholdt.
Bremen (free city).....	166,392	1885	1,693.00	The "Oberschulbehörde," Dr. J. O. Stannmann (senator), presiding officer.
Great Britain, etc.:				
England and Wales.....	29,247,151	1887	485.46	The "Scholarchat," Dr. A. Pauli (senator), chief officer.
Scotland.....	63,989,731	1886	132.00	Committee of council on education.
Ireland.....	64,918,238	1885	151.00	Lord President for England and Scotland, Viscount Cranbrook; vice-president for England, Sir W. Hart Dyke; vice-president for Scotland, Marquess Lothian.
Italy.....	29,918,697	1886	262.00	Commissioners of national education in Ireland.
Japan.....	38,151,257	1886	297.00	Signor Michele Coppino, minister of public instruction.
Netherlands.....	4,300,857	Dec. 31, 1886	347.00	Arnout Mori, minister of public instruction.
Norway.....	2,303,358	1885	16.00	Dr. J. Heemskerck, minister of the interior.
Sweden.....	2,846,102	1880	179.00	
Switzerland.....	265,093,375	1881	123.00	
British India.....	23,108,775	1885	228.00	K. M. Chatfield, director of public instruction.
Bombay Presidency.....	3,736,771	1881	42.00	R. G. Hodson, officiating director of public instruction.
Lower Burma.....	3,817,465	1886	31.00	
Algeria.....	6,225,000	1885	2.00	Langham Dale, superintendent-general of education.
Canada:				
Cape of Good Hope.....	49,459	1881	.14	S. D. Pope, superintendent of education.
British Columbia.....	65,954	1881	.53	J. B. Somerset, superintendent of education for the Protestant schools.
Manitoba.....	833,182	1883	12.00	William Crockett, chief superintendent of education.
New Brunswick.....	440,572	1881	21.00	David Allison, superintendent of education.
Nova Scotia.....	1,423,228	1881	19.00	George W. Ross, minister of education.
Ontario.....				

TABLE 110.—Comparative Statistics of Elementary Education in Foreign Countries.—PART II.

Countries.	Date of Report.	School Age.	School Population.	Educational Statistics.																
				Elementary Schools.										Normal Schools.				Expenditure.		
				Pupils.					Teachers.											
				Enrolment.			Average Attendance.	Male.				Female.							Total.	Number of—	Teachers.	Pupils.
				Boys.	Girls.	Total.														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16					
Austria-Hungary:																				
Austria.....	1885-86	6-14	3,363,439	16,659	1,414,149	1,316,619	2,700,768	.....	43,558	12,275	55,833	69	942	7,609	\$5,102,883				
Hungary.....	1886	6-15	2,324,735	16,417	.....	.....	1,870,083	.....	.....	.....	23,980	70	670	3,905	5,689,764
Belgium.....	1886	6-12	.....	5,481	330,549	260,900	{ 64,505,108	.....	.....	.....	10,938	251	.....	.....	.....		
France.....	1886-87	6-13	4,729,511	{ 613,613	.....	.....	{ 61,001,810	.....	.....	.....	{ 698,769	90	1,193	8,938	236,008,028
Germany:																				
Bavaria.....	1884-85	6-16	.....	7,131	412,518	430,110	842,628	.....	17,229	4,691	21,920	18	225	1,426	3,420,322			
Prussia.....	1886	6-14	4,815,974	34,016	2,422,044	2,416,203	4,838,247	.....	59,126	6,897	66,023	113	972	9,752	27,754,524				
Württemberg.....	1885-86	6-14	.....	154,184	169,996	324,180	.....	.....	6,650	2,118	8,768	19	57	.....	.....			
Saxony.....	1884	6-14	.....	2,151	262,886	270,990	533,876	.....	.....	.....	.....	.....	267	2,318	4,385,020
Hamburg (free city).....	1887-88	6-14	.....	{ 775	27,539	27,418	54,957	.....	813	418	1,231	2	.....	103	.....				
Bremen (free city).....	1886-87	6-14	.....	{ 91,065	13,714	13,983	27,697	.....	.....	.....	.....	1	.....	69	.....				
Great Britain, etc.:																				
England and Wales.....	1887-88	{ 5-14	5,883,027	19,154	4,600,301	3,544,564	90,628	44	3,272	34,045,475				
Scotland.....	1887	5-14	824,330	635,664	494,373	12,085	7	857	5,074,069				
Ireland.....	1886	5-13	999,657	8,024	{ 7,055,585	400,484	11,709	4	575	4,419,235				
Italy.....	1884-85	6-12	42,896	1,068,555	886,709	1,955,264	43,599	10,239	9,064,665				
Japan.....	1884	6-14	6,164,190	28,701	2,197,634	993,402	3,190,436	26,939	65	714	7,270	9,064,665				
Netherlands.....	1886-87	6-12	4,124	6,222,191	6,234,480	6,161,671	2,126,687	14,064	561	4,786,498				
Finland.....	1885-86	7-16	376,145	873	28,662	24,236	52,898	1,131	4	42	597				

Switzerland.....	1881-82	4,386	218,191	215,889	434,080	5,840	2,525	8,365	1,255	2,854,855
British India.....	1885-86	111,117			2,811,934					8,361,000
Bombay Presidency.....	1885-86	7,620	403,717	39,660	434,377				11	732
Lower Burma.....	1885-86	5,066			111,636					121,713
Algeria.....	1885-86	5,777			658,427					550,152
Cape of Good Hope.....	1886	1,107			410,276					992,562
Canada:					75,737					
British Columbia.....	1886-87	89	2,843	2,502	5,345	2,873		116		88,521
Manitoba.....	1886		19,041	17,885	116,926	78,128				1,552,819
New Brunswick.....	1887				68,583	33,700		1,507	6	413,967
Nova Scotia.....	1886-87				105,137					620,000
Ontario.....	1887		257,030	230,466	487,496	239,014	2,727	7,364	2	3,043,461
Prince Edward Island.....	1886-87		12,446	10,014	22,460	12,325	275	5,005	1	146,778
Quebec.....	1885-86		110,579	106,462	217,041			5,406	1	2,657,404
Jamaica.....	1887	4,500			62,424	35,613		1,016		133,259
Trinidad.....	1885-87	133			14,713	10,082		138	18	77,115
Costa Rica.....	1885	216	7,355	6,068	13,413		161	310		212,138
Guatemala.....	1885	872			39,295			1,087		
Nicaragua.....	1885-86	190	8,214	5,416	13,680	7,513		213		
Argentina Republic.....	1887	2,228	92,500	80,504	173,184	149,387	1,871	4,339	34	730
Chili.....	1887	950	43,640	37,732	81,362	55,813		3	3	457
Uruguay.....	1887	366	16,537	14,035	30,572		236	673		
Venezuela.....	1886	1,367			93,466			2,279	4	107
Hawaii.....	1886	172	5,060	3,366	9,016			300		
Mauritius.....	1885	140			14,547	9,553		356		
New South Wales.....	1887	2,174			185,163	106,408		3,841	2	2,457,445
Queensland.....	1886	467			50,295	32,250	624	1,348		874,012
South Australia.....	1885	504			44,405	28,000	415	666	1	441,561
Victoria.....	1885-86	1,892	116,656	110,826	227,482	122,311	1,541	2,619	1	2,970,791
New Zealand.....	1884	91			4,156	3,167				9,235
West Australia.....	1887				110,919	87,937	1,259	2,862	4	1,758,081
Tasmania.....	1886	209	8,742	7,272	16,014	7,856	137	233		112,294

a Increase over preceding year caused by reopening of schools.

b Includes normal courses.

c Public.

d Private.

e Total expenditure for primary education.

f Schools.

g Classes.

h Number on which grants were allowed.

i Total enrolment for the year.

j Includes provincial, communal, and private normals.

k Includes public, subsidized private, and private schools.

l Protestant schools only.

TABLE 111.—*Ratio of School Enrolment to Total Population and to School Population in Foreign Countries.*

Countries.	Ratio of Enrolment to Total Population.	Ratio of Enrolment to School Population.	Countries.	Ratio of Enrolment to Total Population.	Ratio of Enrolment to School Population.
	Per cent.	Per cent.		Per cent.	Per cent.
Austria-Hungary:			Canada:		
Austria.....	12	82	British Columbia.....	11	.....
Hungary.....	11	89	Manitoba.....	26	.....
Belgium.....	10	.....	New Brunswick.....	21	.....
France.....	14.64	112	Nova Scotia.....	24	.....
Germany:			Ontario.....	25	81
Prussia.....	17.73	90	Prince Edward Island.....	20	93
Württemberg.....	16	.....	Quebec.....	16	.....
Bavaria.....	16	.....	Jamaica.....	11	.....
Saxony.....	17	.....	Trinidad.....	9	.....
Hamburg (free city).....	11	.....	Costa Rica.....	7	42
Bremen (free city).....	17	.....	Guatemala.....	3	.....
Great Britain, etc.:			Nicaragua.....	5	40
England and Wales.....	16	663	Argentine Republic.....	4	.....
Scotland.....	16	77	Chili.....	3	.....
Ireland.....	14	71	Ecuador.....	2	.....
Italy.....	6	.....	Uruguay.....	5	.....
Japan.....	9	54	Venezuela.....	5	.....
Netherlands.....	14	.....	Hawaii.....	11	.....
Finland.....	2	14	New South Wales.....	18	91
Switzerland.....	15	.....	Queensland.....	22	131
British India.....	1	.....	South Australia.....	14	.....
Bombay Presidency.....	2	.....	Victoria.....	23	112
Lower Burmah.....	3	.....	West Australia.....	13	.....
Algeria.....	2	.....	New Zealand.....	19	.....
Cape Colony.....	23	140	Tasmania.....	12	.....

a Population 3-14.

PUBLIC INSTRUCTION IN FRANCE.

REPORT TO THE DEPARTMENT OF STATE BY THE HON. J. L. BATHBONE, CONSUL-GENERAL.

I.

At the close of the Revolution the state of public instruction in France was extremely bad. The law of April 30, 1803, revived it somewhat, and the establishment of the Imperial University in 1808 brought about complete re-animation.

The university formed a corps, having complete charge of education throughout the Empire; at the head was a grand master, assisted by a council, all appointed by the Emperor.

The Empire was divided into as many academies as there were imperial courts (27). Each academy was governed by the rector, and controlled absolutely within its jurisdiction the establishment and conduct of all degrees of instruction.

A director and an academic council were associated with the rector. In addition there were a number of inspectors-general to watch over the condition of education throughout the Empire, to verify the capability of the teachers, and to report the progress of the pupils. But with all this, primary education was neglected and schools were established only in the communes sufficiently rich to support them.

Since the establishment of the university changes have been made. There is no longer a grand master, but a "Minister of Public Instruction," whose functions are less autocratic. Under the former régime no one could open a school without the permission of the grand master. By the laws of March 15, 1850, and July 12, 1815, any Frenchman of proper age and conforming to the laws may found a school of any grade.

MINISTER OF PUBLIC INSTRUCTION.

But the minister's powers are yet very considerable. It is upon his proposition that the President of the Republic names and revokes the inspector-general, the rectors, the professors of the faculties, and the administrators of public libraries. The minister directly names and revokes the professors of secondary instruction, the inspectors of primary instruction, employes of public libraries, and in general all functionaries of public instruction.

FUNCTIONS OF THE COUNCIL.

The council is composed of the minister of public instruction (president of the council), three members of the council of state, five members of the institute, members from the army, the navy, the Catholic Church, the Protestant Church, and nine lay members; in all, thirty-nine (39) members.

The council prescribes the course of instruction in all public schools, establishes new lycées and communal colleges, and determines what assistance shall be given to private schools. It determines further what books shall be used and what proscribed as being contrary to the constitution, law, and morality, and grants licenses to foreigners to found schools in France; finally, it has judiciary functions, and pronounces in the last resort in cases tending to exclude teachers from their profession.

THE INSPECTORS-GENERAL.

The inspectors are eighteen (18) in number, and their duty is to collect information regarding all questions concerning public instruction in France, and report the same to the minister. Twelve (12) of them, together with certain professors, form a consultation council at which the minister presides.

THE ACADEMIES.

Below the central body come the academies. The rectors superintend the higher and secondary schools, oversee the free schools, and control the primary schools. Each convokes the faculties of the various schools in his department to devise courses of study and transmits these courses to the minister, together with his views upon them. Associated with him are an inspector and an academic council. These academies are not, as the word would imply with us, institutions of learning, but the representatives of the Government in the district.

THE HIGHER NORMAL SCHOOL.

To complete the educational framework, normal schools were established to train teachers for the primary schools, and a higher normal school to prepare teachers for the lycées, communal colleges, and all schools of instruction above the primary grade. The pupils are at the charge of the state. The number of pupils to be admitted each year is determined by the minister, according to the needs of education.

II.

Public instruction is divided into three grades, primary, secondary, and higher.

Primary Instruction.—Primary instruction is obligatory, and includes religious instruction, reading, writing, arithmetic, geography, history of finance; and for girls, needle-work. Except in small places, the children of the Protestant and Catholic faiths have separate schools, and the sexes are also separated.

Attendance is compulsory; tuition is free to children whose parents are unable to pay. Every commune must support at least one primary school, or a free school affording the same opportunities, but in cases of thinly populated communes they may, by the consent of the minister, combine to support a school. Budgetary aid is rendered only to communes which are unable to wholly sustain the expenses of their schools.

Secondary Instruction.—The schools of this grade correspond very nearly to our high schools. Instruction is given in languages, ancient and modern, mathematics, the elements of natural sciences, history, and literature.

Belonging to this class are all the lycées, communal colleges, and nearly all the institutions known as free schools, *i. e.*, giving free tuition, although not belonging to the state.

By a law passed in 1865, special secondary schools were established where the dead languages are not taught, and special attention is given to fitting pupils for business.

Higher Instruction.—Higher instruction is given by what is known in France as the faculties, supplemented by a number of preparatory professional schools. The faculties are those of law, medicine, theology, science, and literature. The preparatory schools are a higher school of pharmacy, schools of medicine, chemistry, and literature.

III.—SPECIAL SCHOOLS.

Besides the public schools system there exists to-day in France quite a number of schools for instruction in special branches of knowledge; some of these, like the School of Telegraphy, are exclusively for Government employes, while others, like the Free School of Political Science, are open to the world.

The Schools of Telegraphy.—Intended to fit employes of the post-office and telegraph system.

The Military School of St. Cyr.—Corresponds to our school at West Point. This school was established at Fontainebleau by Napoleon I in 1802, but was soon removed to its present site.

The Pyrtanee.—A school for the education of the children of army officers.

Schools of Manual Apprenticeship.—These are supplementary to the primary schools and fit the pupils for the farm and the workshop. The instruction is both theoretical and practical. To gain admission to any of the above special schools the applicant must either be born French or naturalized.

Higher Schools of Commercial Studies.—These are devoted exclusively to higher commercial studies, and designed to fit students to be merchants, bankers, administrators, and directors of manufacturing and commercial companies, etc. Foreigners are admitted.

National School of the Industrial Arts at Bourlax.—The course at this school is practical and theoretical study of the local manufacture of cloth, which is very celebrated. Foreigners are admitted by means of a letter from their ambassador or consul.

The Polytechnic School at Paris.—To fit for military, naval, and hydrographic engineers, for engineers of the military bridge corps, superintendents of state manufactories, telegraph lines, etc., and all other careers demanding extended study in mathematics, physics, and chemistry. Foreigners are not admitted.

High School of Mines at Paris.—Extended study of chemistry, physics, electricity, mining engineering, etc. Foreigners are admitted free, but no diplomas are granted to them; only certificates of study.

School of Master Workmen of Mines at Calais.—To fit foremen of miners, managers of mines, etc. To be admitted to this school the applicant must have worked in the mines at least eighteen months. The course of study is both theoretical and practical, six months of each year being spent in the school and six in the mines. The course is for three years. Foreigners are admitted.

Schools of Roads and Bridges.—To form a corps to construct and keep in repair the military and strategic roads and bridges. Foreigners are admitted after a great deal of formality.

Schools of the Fine Arts at Paris, Bourges, Dyon, and Lyons.—Instruction is given in drawing, painting, sculpture, engraving on wood, copper, and steel. Foreigners are admitted to all these schools.

National School of Decorative Art at Paris.—This school is open to foreigners on application to the director through the aid of their ambassador and consul-general and the minister of fine arts.

Agricultural Schools.—At the head of these is the Institute of Agronomy, intended to fit pupils to be teachers in the national schools of agriculture, to be scientific proprietors or managers of farms, and to be capable administrators of public duties where agricultural and vinicultural interests are involved.

National Schools of Agriculture.—At these schools practical and theoretical instruction is given in agriculture, viniculture, irrigation, dairying, etc., and at Rambouillet is a shepherd school.

School of Horticulture at Versailles.—Gardeners are taught their duties at this school, the course being both theoretical and practical.

School of Forestry at Nancy.—To this school foreigners are admitted through their ambassador. The majority of the pupils are those who expect to enter the government employ as keepers of the national forests.

Veterinary Schools.—There are three of these, at Lyons, Toulouse, and Alfort.

Schools of Arts and Trades.—The central school at Paris is known as the School of Arts and Manufactures. It graduates engineers for all branches of industry and for public works which do not pertain directly. Foreigners are admitted on the same terms as Frenchmen.

The other schools are situated at Aix, Angers, and Châlons. Candidates for admission must be French. These are regarded as by far the most important of all the industrial schools.

They are intended to turn out workmen thoroughly skilled in all mechanical employments. These schools accommodate three hundred pupils each, who must be French.

Schools of Watch and Clock Making.—There are two. Foreigners are excluded.

There are several schools of lace-making and five schools of weaving. In the latter the course includes the theory and practice of weaving, designing patterns, and weaving them, the study of dyes and their application to the cloths. The school at Lyons has a special course on the manufacture and dyeing of silk stuffs. The others are situated at Nîmes, Reims, Amiens, and St. Etienne.

Free School of Political Science.—This school closes the list of special schools. Instruction is given in diplomacy, administrative law, finance, constitutional law and history, political economy, training and knowledge required by government officials in France and by consuls and consular agents, and, in fact, in all branches of government.

The budget¹ of the minister of public instruction shows the following figures for the year 1879 to 1886:

Years.	Higher Normal Schools.	Higher Communal Schools.	Lycées and Communal Colleges.	Extraordinary Expenses of Lycées.	Primary Institutions.	Total Budget.
	<i>Francs.</i> ²	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
1879	401,000	300,000	5,625,000	1,500,000	23,350,000	59,725,000
1880	450,000	300,000	6,110,000	6,500,000	21,014,000	80,155,000
1881	479,000	300,000	8,470,000	6,500,000	32,685,000	83,229,000
1882	488,000	300,000	9,738,000	9,836,000	59,484,000	129,240,000
1883	500,000	300,000	11,274,000	9,850,000	77,034,000	145,721,000
1884	500,000	300,000	12,640,000	12,764,000	75,076,000	166,736,000
1885	500,000	296,000	10,739,000	11,937,000	61,621,000	168,408,000
1886	500,000	326,000	10,939,000	11,876,000	62,368,000	134,919,000

Besides, the primary schools receive annually about twenty million francs from the budget of extraordinary resources. Many of the special schools are not under the ministry of public instruction and so figure in other schools. The ministry of the interior's budget includes the following schools:

Years.	School of Roads and Bridges.	School of Mines, Paris.	Other Schools of Mines.	Totals.
	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
1879	378,000	234,000	64,000	726,000
1880	360,000	235,000	65,000	710,000
1881	357,000	299,000	61,000	717,000
1882	380,000	305,000	63,000	748,000
1883	401,000	315,000	70,000	786,000
1884	400,000	328,000	73,000	801,000
1885	428,000	329,000	76,000	833,000

Under the ministry of agriculture are:

Years.	Veterinary School.	National Institute of Agronomy.	Agricultural Schools.	Practical Farm Schools.	Horticultural Schools.	Totals.
	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
1879	916,000	241,000	730,000	468,000	90,000	2,445,000
1880	1,127,000	253,000	752,000	514,000	101,000	2,747,000
1881	1,112,000	258,000	794,000	488,000	102,000	2,755,000
1882	1,155,000	271,000	824,000	516,000	103,000	2,869,000
1883	1,136,000	313,000	816,000	590,000	103,000	2,958,000
1884	1,167,000	278,000	828,000	649,000	94,000	2,954,000
1885	1,145,000	277,000	806,000	649,000	91,000	2,968,000

¹ The appropriations from the public treasury are supplemented by communal taxes.

² The equivalent of a franc is 19.3 cents.

Years.	Conser- vatory of Arts and Trades, Paris.	Schools of Arts and Trades.			
		Aix.	Angers.	Chalons.	Totals.
	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
1879.....	349,000	349,000	370,000	372,000	1,072,000
1880.....	356,000	394,000	421,000	416,000	1,231,000
1881.....	371,000	396,000	402,000	409,000	1,207,000
1882.....	378,000	373,000	431,000	424,000	1,229,000
1883.....	378,000	381,000	410,000	429,000	1,222,000
1884.....	441,000	388,000	403,000	452,000	1,244,000
1885.....	441,000	398,000	399,000	447,000	1,245,000
1886.....	441,000	400,000	394,000	442,000	1,237,000
1887.....	296,000	350,000	370,000	365,000	1,085,000

GREAT BRITAIN.

REPORT OF THE SCIENCE AND ART DEPARTMENT.

The following information is derived from the thirty-fifth report of the science and art department, whose operations embrace the United Kingdom of Great Britain and Ireland.

The department fosters instruction in science and art by grants to elementary schools and to training colleges upon the results of examinations in the subjects specified, by grants for buildings and apparatus for science schools, and by provision for local exhibitions and scholarships.

The department also has charge of special schools of science and art and museums of science and art.

SCIENCE DIVISION.

Elementary Science.—In 1887 the department examined 1,684 elementary schools in which science instruction was given according to the requirements. These schools were located as follows: In England and Wales, 1,223; in Scotland, 227; in Ireland, 234. The number of pupils in them receiving science instruction was 103,088, and the number who came up for examination was 62,275, which, with 5,345 self-taught students, made a total of 67,620 examined. Of this number 51,248 were successful in passing in one or more subjects.

Advanced Scientific Instruction.—The total number of students under instruction in the various divisions of the Normal School of Science and Royal School of Mines was 267. As in former years, summer courses for country teachers, which last about three weeks, and are a most important part of the work of the school, were given in chemistry, light, botany, machine construction and drawing, and agriculture and agricultural chemistry. These courses, which consisted of lectures and laboratory practice specially adapted to the particular class of students, were attended by 182 teachers.

Courses of lectures in biology, chemistry, and mechanics were also given to working-men. The number of tickets sold at sixpence each being, for the three courses, 295, 458, and 357, respectively.

The number of students attending the Royal College of Science, Dublin, was eighty. A course of fifteen voluntary lectures on elementary chemistry given during the first half of the year was attended by twenty-seven students and a similar course of seventeen lectures on mechanics was attended by eight students.

The growing appreciation of science instruction in the Kingdom is indicated by the steady increase in the number of students pursuing the same and in the marked improvement in results. As compared with 1877 the number of students receiving instruction in elementary science in 1887 showed an increase of 84 per cent.; the number presenting themselves for examination, increase of 96 per cent.; and the number passing, increase of 97½ per cent.

ART DIVISION.

Drawing in Elementary Schools.—In 1887 drawing was taught in 3,979 elementary schools; of these 516 were situated in Scotland and under the inspection of the Scotch education department, by whom the grants were paid. The number of pupils and pupil teachers examined for results in drawing in these schools was 684,306.

Examinations were also held in fifty-one training colleges in the five subjects of the

drawing certificate. These subjects, with the number of students examined and passing in each, were as follows:

Subjects.	Number of Students Examined.	Number Passing.
Free-hand drawing.....	1,700	775
Geometrical drawing.....	1,624	959
Model drawing.....	1,871	895
Perspective.....	1,758	1,084
Blackboard drawing.....	1,643	1,008

Art Schools and Art Classes.—The total number of students receiving instruction in schools of art and art classes aided by the department was 74,701, in addition to which 122 schools unaided by the department were examined. In the National Art Training School, South Kensington, 590 students were under instruction. The system of having short courses of instruction at South Kensington for teachers of provincial schools during the summer vacations, which had been found so advantageous for science teachers, was extended to those in art in the summer of 1887. The experiment was successful in every way.

Expenditure of Department.—The expenditure of the department for the financial year 1887-88 amounted to \$2,093,771, which was apportioned as follows: Expenses of administration, including central staff office, \$137,109; direct payments, prizes, etc., to encourage instruction in science, \$498,269; direct payments, prizes, etc., to encourage instruction in art, \$473,077; services common to both science and art instruction, \$283,994; institutions supported or aided by the state through the department of science and art, \$275,611, and the South Kensington and Bethnal Green Museums, including the expenses of circulation of science and art objects to country institutions, \$425,712.

OPERATIONS OF THE TECHNICAL EDUCATION ACT, SCOTLAND.

With respect to the act of 1887 providing for technical education in Scotland the committee of council on education say:

"The technical schools act (Scotland) has opened to school boards a new field of operations in regard to a branch of education to which public attention has of late been very closely directed, and which greatly affects the future of secondary schools. In view of the fact that the act came into force after the recent elections of school boards, we thought it right to issue a circular letter on the subject in anticipation of those elections, pointing out the character of the operations possible, and inviting the attention of the constituencies to the new powers which would be vested in their representatives, and to the various systems of technical education already established elsewhere.

"It is a matter of regret that the subject does not appear to have been very prominently brought forward during the elections, and that school boards, perhaps, as a consequence, show some hesitation in starting upon any new operations. We have now received three hundred and eighty-one replies to our inquiry which was addressed to nine hundred and eighty-one school boards, and only a very small number of these indicate any intention of taking action under the act. We are not disposed to infer from this that the subject is disregarded, and, on the contrary, we believe that it is attracting that attention which its importance and urgency demand, and that discussion is now doing much to define the proper aims and methods of such instruction. School boards naturally feel hesitation about launching upon new expenditure, and are, perhaps, disposed to watch the results of experiments elsewhere. We feel confident that they will be ready to follow the example of those who are bold enough to enter upon the work, and, in once more drawing attention to the vital importance of the question, we can assure the local authorities of our zealous co-operation in any efforts which they may make. We have already referred to certain branches of technical education which come within the sphere of the elementary schools, particularly to drawing, agriculture, and the industrial instruction of girls; and we are ready to consider any proposals by which these may be developed, and by which they may be carried on in secondary and evening schools. Technical instruction is already very considerably developed in several of the higher schools."

"In a private school of well-established position we have found a commercial department very thoroughly developed, and we shall watch with interest this experiment of giving instruction in the details of office work. In any project for the advancement of

technical education we would again impress upon school boards the importance of enlisting the co-operation and sympathy of those who represent the manufacturing and industrial interests of each district; and we would, in reference to the difficulty of isolated action which has been felt by some boards, point out the powers of combination between different boards which are given by the act. We are convinced that it is only by such co-operation and combination that a system of education which may undoubtedly require considerable expenditure, but which justifies that expenditure by the important influence it may have upon national prosperity, can be successfully established."

INSPECTION OF SECONDARY SCHOOLS IN SCOTLAND.

In 1885-86 the Scotch education department undertook the inspection of secondary schools.

Their report of this work for the current year (*i. e.*, 1887-88) contains many observations of general interest. As was expected the immediate result of the inspection was the exposure of defects in the schools. With respect to this particular the committee say:

"We found the schools in many cases working under adverse conditions, with insufficient resources and staff, and with a curriculum inadequate to modern demands. We found no common standard, and a very wide divergence between the range and achievement of schools nominally of the same class. There was much earnestness shown by the general body of the teaching staff, and, generally, there was a desire on the part of managers to increase the efficiency of the school under their charge, but there seemed to be considerable doubt and difference of opinion as to the proper aims and organization of a secondary school."

The beneficial results of the inspection are already noticeable. "The number of schools under inspection has increased from thirty-eight to forty-seven, twenty-two being higher class public schools, seventeen endowed schools, and eight schools under voluntary managers who have invited the inspection of the department.

* * * "In one or two cases renewed inspection has shown the adverse conditions to be almost insuperable, and has led managers seriously to consider the organization of the school on a new basis. In other cases a school is found to fail from causes which are evidently accidental and temporary. But as a rule the inspection has given evidence of renewed activity of a curriculum developing so as to meet modern requirements and of a more defined aim and improved organization. Special and increased attention is evidently given to the instruction in science, although in some cases the inspectors have found that it was more developed on what may be called the bookish than the practical side. Modern languages are taught in some cases with very considerable success, but a difficulty evidently arises which will occur to most of those interested in these languages as a branch of education, as to the different aims for which they may be studied—for the sake of the training of the mental faculties by careful grammatical accuracy, on the one hand, and for the sake of developing the imitative and conversational faculty, on the ground of its practical value, on the other. The reconciliation, as far as possible, of these two aims is a question which most urgently demands the attention of those who are best qualified to guide public opinion on the subject. In English we have found evidence of much sound work, although there appears to be some disposition, which we regret, to lay aside the study of history and geography in the more advanced classes, where it is especially valuable in training the judgment and widening the interests of the scholars, and to confine the instruction in these subjects to the elementary facts, learned by rote in the earlier classes.

"In what are commonly called the university subjects, Latin, Greek, and mathematics, the instruction is evidently, on the whole, sound and thorough, and in the last-named the Scotch higher schools are remarkably well advanced.

* * * "In connection with the inspection of higher schools the department has this year carried out the plan of a leaving-certificate examination. This was undertaken after careful consultation with the universities and with the authorities of secondary or higher class schools.

"Various professional bodies have announced their readiness to accept the certificate granted by the department, in lieu of the preliminary examination required from those entering upon a course of professional study. The examination will thus contribute materially to concentration of work in the secondary schools, where much inconvenience has been caused by the necessity of preparing pupils for various examinations of much the same standard, but based, in each case, upon different prescribed books. The certificates have been issued of three grades, honors, first grade, and second grade.

"The total number of candidates for the same was 972, in six subjects, and out of a possible number of 2,925 certificates, 2,334 were issued in the various grades."

EDUCATION IN SWITZERLAND.

REPORT TO THE DEPARTMENT OF STATE BY THE HON. BOYD WINCHESTER, MINISTER
RESIDENT AND CONSUL-GENERAL.

Since the day of Pestalozzi the science of pedagogy has received much attention, and to-day enjoys a high rank in Switzerland. A Switzer will tell you that no boy, no girl exists in the Confederation, save idiots and those under school age, who cannot read and write. The exceptions to this rule are not sufficient to constitute an illiterate class. They have laid broad and deep the foundations of an admirable system of public instruction. The law declares that the happiness of the people is to be found in good morals and good instruction, and that in a free country every citizen should have placed in his reach an education fitting him for his rights and his duties. The primary business of the state in Switzerland may be said to be keeping school. A school is one of the first things present to the eyes of a Swiss child and one of the last things present to the mind of a Swiss man. It comes to him in his cradle and attends him to his grave. On coming to a certain age the right to stay at home and play ceases. He is a member of a commune, and the commune will not suffer him to live and grow up in ignorance. The school seizes him, holds him fast for years and rears him into what he is to be. If a school is fate to a Swiss child, the vision comes to him pleasantly in likeness of a fairy. The fairest edifice a Swiss can see, when he goes out to walk, is his village school, his city school, or his cantonal school. The court-house, jail, town hall may be concealed in some obscure corner, but a school is sure to be in sight, the pride of every village slope and every city square. In travelling over Switzerland last summer there was not one court-house of sufficient architectural dignity to attract attention; a nearly two years' residence in Berne has not discovered that legal forum (which, in every American city, is the most conspicuous structure), but everywhere are to be seen commodious and handsome public school buildings. With the exception of the Federal Hall at Berne, and the Federal Tribunal at Lausanne, the Polytechnic, in Zurich, is the finest edifice in the country. The children are so much accustomed to regard the school-house as the foremost building in a city that it is related that a Swiss, with his child, visiting France, and, being at Versailles, he heard her clap her hands and cry with glee, "Look here, papa; here is the school-house!" It was the garden front of that magnificent pile. The school in Switzerland is made to the child, by public and private acts, a centre of happy thoughts and pleasant times. It shares the joys of home and the rewards of church. At school a Swiss boy finds his mates with whom he learns to sing and play, to drill and shoot. The teacher is to him a father. With that teacher he will grow into a man, assisted on his way with care and love, unmixed with either foolish fondness or paternal pride. All bright and pleasant things are grouped about him, and in after-time those class-room days will always seem to him the merriest of his life.

Philanthropy and love of home, two very prominent Swiss characteristics, the un-failing and fruitful source of so many virtues, make the people desirous of giving every chance to their children; and they are proud of and cheerfully spend their money on their schools. The school, the pupil, the teacher, are forever in the public eye. The scholars promenade the streets with music, flags, and songs. All men make room for them, salute them, glory in them as the highest product of the state.

The Swiss school organization proper may be said to date from 1830, and has for its basis the system of Pestalozzi (originally developed here by that celebrated philosopher and savant, who more than a century ago lived at Yverdun, his school-house being an ancient castle erected by the Count of Zähringer in the twelfth century), a system that has furnished a model for the rest of Europe, and especially for Germany. The department of public instruction is the most important and expensive branch of the cantonal government. The two great items of expense which appear in the budget of a Swiss canton are the roads and public instruction. The sums bestowed on these are immense, relative to the total means of the cantons, standing far ahead of the army, which is a very startling fact in Europe, where the cost of the public forces, in times of absolute peace, is nearly fourteen times that of the public schools. The last report published for 1887 shows that the twenty-two cantons expended for schools about 10,800,000 francs, which is the product of school tax, cantonal and commercial. The amount appropriated for the purpose at this time is known to be very much larger, but cannot be accurately given; yet, as giving an approximate idea of the increase, it may be stated that the amount expended by the canton of Berne in 1877 was 1,692,411 francs, while the budget for this year (1887) sets apart for the same purpose 1,925,531, an increase of 233,000 francs.

Article 27 of the federal constitution is as follows:

"Cantons will provide for sufficient primary instruction, which shall stand under the exclusive supervision of the state. It is to be obligatory and in the public schools

gratis. The public schools shall be so conducted that they may be attended by the children of all confessions, without their liberty of faith and conscience being encroached upon. Against cantons which neglect to follow these provisions the confederacy is to take the necessary steps."

It will be observed that primary instruction is thus made obligatory by federal law, and in the public schools gratuitous. This gratuity, by special provisions in many of the cantons, is made to include books and other school materials, and is extended to children of paupers. The Swiss cantons are jealous of their independence in local affairs, and a proposal to appoint a federal secretary of education was rejected by a large majority; but, so far, the cantons have observed in good faith the requirements of the constitution. Each canton has its own school law. The school age usually begins at six or seven and continues to fourteen or fifteen. Compulsory education is not regarded as any interference with personal liberty.

Parents who neglect or refuse to send their children to school are cited before the authorities and fined, and in case of repetition of the offense may be imprisoned. The provision of the constitution guaranteeing freedom of faith and conscience in the public schools has been complied with by the cantons, in a way suitable to their wants, with no unfair dealing, no proselyting, and no complaint. All the schools have religious instruction, and by common consent it partakes of the character of the majority: Catholic instruction in Catholic cantons, and Protestant in Protestant cantons. Preachers cannot be officially nominated as inspectors, presidents, or members of the school regents, but they may take these places by popular election, which frequently occurs in the Protestant cantons. It is yet a disputed question whether persons who belong to religious orders, claiming allegiance paramount to the state, can be teachers in the public schools. The schools may be classified into primary, intermediate, universities, and seminaries, or normal Schools.

The organization of the primary schools is under cantonal supervision. Generally each commune has a public primary school adequate to the demands, and graded as to age and progress. These schools are day schools, with annual vacations from ten to twelve weeks, and are supposed to embrace the pupilage for the first five to six school years. The lessons average from twenty to thirty weekly. The pupils of the upper classes who are old enough to assist at work at home are permitted to attend school one-half of the day during the summer, or to attend what are called supplementary schools, with only six to ten lessons per week. The expenses of these schools are defrayed by the communes with a subvention from the canton, varying much in amount, yet enough so that the public primary schools are free, as required under the constitution. The course of studies in the primary schools embraces: 1. Religion; 2. Native language; 3. Ciphering; 4. Writing; 5. Physical and practical geography; 6. History of Switzerland; 7. Elements of natural science; 10. Singing; 11. Gymnastics; 12. For girls, manual work of knitting and sewing.

Connected with the primary schools in some cantons are what are called *Secundär-schulen* or secondary schools. These are open during the winter months in the evenings and on Sundays, and the course includes book-keeping and business composition, such as letters, bills, contracts, obligations of various kinds appertaining to trade and industry. In many cantons these supplementary or advanced divisions of the primary schools are both free and obligatory; in others voluntary with an average charge of 5 francs. In the cantons of Lucerne and Zurich the children from the primary schools are given four years of gratuitous tuition in these secondary divisions. At the close of the year 1884 there were reported in attendance at the primary schools 455,493 pupils, under the care of 8,763 teachers. Sixteen cantons provided 437 secondary schools with 28,500 pupils.

The intermediate schools present much variety and have only one feature in common, that they represent a higher grade than the primary with an enlarged and more deepened course of study, extending to elements of literature in the mother tongue, composition of advanced kind, reading of classical authors, higher mathematics, and a foreign language; for the German and Italian cantons, French; for the French cantons, German. Geography and history also become much extended. These schools do not have any pretensions beyond what their title of "intermediate" indicates. There are many branches and grades within these intermediate schools. There is what is called the district school and under-gymnasium. In these still more advanced literary, technical, and artistic instructions are given. The ancient languages, Greek and Latin, Natural History, Physics, Chemistry, etc., are taught. In most of the cantons these schools are free, and where a charge is made it runs from twenty to forty francs for the scholastic year. The bulk of the expense is sustained by the communes; some of the cantonal governments, as in Berne, pay one-half of the salary of the teachers and stipends of fifty to one hundred francs to meritorious students wishing to pursue their studies in the higher schools.

The highest degree of the intermediate schools is the high school or gymnasium. These are all subject to cantonal control, with the exception of the canton of Berne, where they are city schools and under the municipal authority. They are divided into gymnasiums, industrial, technical, and commercial schools. The course is three years, except the commercial, which is only two years. The age of admission is from sixteen to seventeen years. The annual charge is from ten to one hundred francs. They are designed as preparatory schools for a university or a polytechnic course. The latest report gives the number of these schools as 58, with 12,500 pupils. As a fair sample the weekly curriculum of a first-class gymnasium for girls in Berne is as follows:

Days.	7 to 8 o'clock.	8 to 9 o'clock.	9 to 10 o'clock.	10 to 11 o'clock.	2 to 3 o'clock.	3 to 4 o'clock.
Monday.....	History	German	Arithmetic..	Gymnastics.	Drawing.....	Drawing.
Tuesday.....	Religion.....	French.....	Natural his- tory.	Singing.....	Study	Study.
Wednesday.....	Arithmetic.	Geography..	German	French.....	Holiday.....	Holiday.
Thursday.....	Religion	Singing.....	History	German	Book-keeping.	Gymnastics.
Friday	French	German	Natural his- tory.	Arithmetic..	Study	Study.
Saturday	Religion.....	French... ..	Geography..	Arithmetic..	Holiday.....	Holiday.

Universities.—There are four of these institutions in Switzerland, located at Basel, Berne, Zurich, and Geneva. The one at Basel was founded in 1460, the others since 1832. These universities are governed by a rector and a senate subject to cantonal control, and are divided into four faculties of theology, jurisprudence, philosophy, and medicine. They will compare favorably in teaching power, apart from the mere accessories of endowments and splendid buildings, with any universities to be found. The tuition depends on the number and character of recitations, being from 2½ to 10 francs per week and one hundred to two hundred francs per annum. The degrees conferred are equivalent to that of doctor in the German universities and bachelor in the French universities. The matriculates in these universities last year were 2,271, including 107 female students, and divided thus: Geneva, 729; Berne, 658; Zurich, 521; Basel, 363, and employing some three hundred professors. In addition to these there is a polytechnic school at Zurich, founded in 1835. The property and improvements were presented by the canton to the confederation, which sustains it by liberal annual appropriation, and the federal budget for 1877 provided three hundred thousand francs for building improvements, being a portion of one million francs contemplated to be used for the same purpose. There were in attendance at the polytechnic last year seven hundred and two students, employing ninety professors.

Seminaries, or normal schools, are established by the cantons and controlled by a director of council of education. Matriculates are received after passing through the secondary schools and their attendance is from three to four years; they are usually lodged and boarded in the seminaries, involving a cost of one hundred and fifty to four hundred francs yearly. To assist poor students whose diligence, promise, and general deportment are marked there are free and half-fee places provided. The number of students at these seminaries in 1886 was 1,223: males 835, females 398. It is estimated that in 1886 the elementary schools, including the secondary and middle-class schools, had a total number of students and pupils of 525,000. The total population between five and fifteen years of age at the census of 1830 was 573,713. To handle this large number of students it required about 5,500 schools and over ten thousand teachers. To this must be added the 2,973 students attending the universities, with 390 professors and the 1,223 students attending the seminaries. Still this does not complete the list, for there are prosperous academies and high schools, such as those at Lausanne and Neuchatel, of which no reliable statistics are available. Then private schools are permitted, the cantons reserving the right to name the conditions under which they will be authorized. Between all the public schools, from the lowest upward to the highest, there is an "organic connection," the university in this natural continuation and correspondence crowning the work begun in the primary school.

The teachers of the public schools are nominated by the school commission and selected by an assembly of the commune. Teachers of the higher schools are appointed by the cantonal director of education and confirmed by the board of education. Each commune must pay to the primary school teacher a minimum salary of 550 francs; but these salaries will run from six hundred to one thousand francs, with free lodging and fuel. Those in the cities receive from 1,200 to 1,700 francs; secondary school teachers, from 2,200 to 3,300 francs, and teachers in the gymnasiums an average of 3,300 francs.

Those teachers are elected for six years, and after service for a certain period are pensioned. The cantons assist the communes in augmenting the lower salaries and the payment of the pensions.

After thirty years of service a pension is paid of not less than half of the salary, which was received at the date of retirement. In some cantons, after five years of service, one hundred francs are added to the salary, and an additional one hundred francs for each succeeding period of five years. In Basel a female teacher, after ten years of service, is entitled to a supplementary pay of fifty dollars per annum; after fifteen years, seventy dollars per annum; and then on retiring, after the fifteen years, a pension for life of two per cent. on the whole amount of salary received during the term of active service.

As a rule the schools are not mixed, and when the commune is not able to sustain separate schools the boys attend in the morning and the girls in the afternoon. In every hamlet where there may be twenty boys and girls a school is provided. All scholars have daily tasks to do at home; the task at home is nearly equal to the task at school. The hours of study, school work, drill and home work, are frequently from ten to twelve hours daily. Indeed, you may say that Swiss children tug at learning in a way that would create a rebellion with the young American.

No week day is a holiday, like the Saturday with us. Each class has so many hours of schooling a week, covering the six days. Singing and gymnastics are taught in the course, and both with reference to a due development of the physical and moral powers.

In other countries it is the political or governing class which establishes popular schools for the benefit of the masses. But in Switzerland the people—the commune—establishes and sustains the school for its own benefit. The same general equality of conditions prevails as in the United States, and the public schools are freely used by all classes, and their establishment and maintenance is a composite charge, made so by the fundamental law. Here is found a full realization of the demand that a career shall be open to all talents; for no system of education can be truly solid, and sound, and democratic, which does not make it possible for the child of superior merit, however humble and poor, to mount the highest round of the educational ladder.

Every canton has in its organic law some expression embodying the idea that the business of a public teacher is to make his boys good citizens and good Christians. In some cantons the distinct announcement is found that the true end of public instruction is to combine democracy with religion, so that every boy attending a public school may grow up into a good citizen and a good Christian. In the law of Zürich it is declared, "The peoples' school shall train the children of all classes on a plan agreed upon, to be intelligent men, useful citizens, and moral and religious people." In Lucerne we find this: "It shall train them for life in the family, in the commune, the church, and the state." In fact, they all bespeak the ineffaceable influence of that great Swiss pedagogue, who uttered that memorable invocation, "Patron saint of this country, announce it in thunder-tones through the hills and valleys that true popular freedom can only be made possible through the education of man."

The Swiss methods of teaching are more gradual, natural, and national than ours—the teaching is less mechanical. There is a patience, the avoidance of our hurry, the being content to advance slowly, the firm securing of the ground passed over. The fundamental maxim with them is from the intuition to the notion, from the concrete to the abstract, founding habits of clear apprehension and clear expression. The system seems to be less wooden than ours; it may result from a regard for the fact, so often overlooked, that variety in mental food is as important as in bodily food for healthy growth, and that children at school are often tired and listless because they are weary and bored. From this, relief is found in singing, drill, and gymnastics; and every effort is made to interest the children and to adapt the methods to their mental processes. It is a common practice with our teachers to give children the rule for doing a sum and then to test them by seeing if by that rule they can do so many given sums right. The notion of a Swiss teacher is that the school hour for arithmetic is to be employed in ascertaining that the children understand the rule and the processes to which it is applied. We put the abstract before the concrete; the Swiss works in the opposite way. Their instruction, in other words, aims to render the pupils capable of solving independently and with certainty the calculations which are likely to come before them in their ordinary life. In each branch of instruction this plan and object are prescribed for the teachers, and it is thought these are best attained by oral teaching and questioning. In one word, they possess and follow a carefully matured service of pedagogy. The attention is easily maintained in spite of the long hours, for at frequent intervals, at least every two hours, the class disperses for a few minutes to the corridors or play-grounds, and the teachers lead and assist on the play-ground as much as they do in the school-room—a companionship of teacher and pupil that is very beneficial and beautiful. Every form of corporal punishment is forbidden. No bodily pain nor bodily shame is suffered in the schools; and this is a true and correct theory of school discipline.

A professor, whose school in Berne it has been my pleasure on several occasions to visit

for purposes of observation, said to me: "A lad has rights; we cannot stunt his food; we cannot lock him up; we cannot put him in a corner; we cannot crown him with a dunce cap; we cannot make a guy of him; our discipline is wholly moral. Our means are prizes, good words; all leading up to public acts of honor. Desire to win a prize has more effect than fear of punishment. Franks and mischief take time, and boys who are ambitious to win the prizes have no time to spare for such purposes." But I said to him you must have some rough types. What means have you of keeping the unruly spirits in order? He answered, "We expel them; but such an emergency rarely occurs. A threat or admonition suffices. In truth, to be expelled from a school is considered only one degree from ruin. When expelled one cannot go to another school. The laws about exchange of school are very strict. No change can be made without a special leave in writing from the inspector of the district school. Expulsion is a public act, and there are three degrees. The first is a forbidding of the school, it may be for a day or a week; and when he returns his parents must come with him and must promise he will mend his ways. The second is removal for a longer period, a month, a quarter perhaps, when he can only resume his place by an express authority from either the inspectors of his district or his village mayor. The third expulsion is a formal and serious official act; the teacher and inspector must unite in recommending it and the educational department must concur." It will be seen that the law considers that every child has a right to come to school, and that this right can be taken away only in strict conformity to the method prescribed. Of course this does not apply to the exclusion of children in cases where the public good and safety is involved, such as children who have failed to be vaccinated or are suffering from loathsome diseases or present disfigured and repulsive forms or faces. There is very little contumacious absence; the children have the habit of going to school as a matter of course and the parents equally the habit of acquiescing in their going.

Therefore the discipline is almost entirely one of self-respect and self-restraint. The children are taught how to think and act, no less than how to read and write. Instruction is made but a part of their education. As much attention is paid to the things of life as to the things of learning. The child's manners and appearance are properly cared for. How he walks, stands, and speaks. That his hands are washed and that he keeps his papers clean. He comes to regard a blot upon his page to be as bad as a smudge upon his face. Said this same professor to me, "A book befouled with grime is wasted and our simple habits will not suffer such waste. Turn over any of these books which are in daily use, no leaf is torn or dog-eared, and no cover defaced with scribbling."

The same observations could have been extended to the furniture and the buildings. The desks, though extremely plain, looked as if they were daily washed and polished; not a spot or splash of ink was to be seen on their bright surface. The large halls and spacious staircases showed no scratch or scrawl of the walls and no bits of paper on the floors. The children are evidently used to strangers visiting their schools, since their attention does not for a moment leave their work, to gaze in wondering curiosity at them. You look around the room containing some fifty boys or girls from seven to ten years old and when informed that they represent all classes from the patrician to the poorest peasant, your first impression is one of surprise to find them all so neatly and decently clad, and none dirty, ragged, or shoeless. The enquiry is naturally made, How is this? "Yes," they say, "Some, not many, come to us that way, but they do not remain that way long. For dirt is but a habit of the eye, and habits of the eye are quickly changed. We wash the dirty ones and send them home with shining skins. A mother gets ashamed on finding that some other woman, or it may be a man, has had to wash her child. The child also becomes mortified, for all the little ones around him are clean and so two or three school washings result in having it afterwards done at home."

Science teaching is assuming a very prominent position in the Swiss school. This science teaching familiarizes the student with the universe in which he lives, and makes him, in the presence of the great laws and forces of nature, not a stranger but a child at home. It is being accepted that the system of education must be brought into closer relation to the new and far advanced knowledge of the time. It is being recognized that science is one of the moulding influences of the modern world; that it is at the foundation of material progress; that it is the basis on which much of the manufacturing industry and commerce rests; that many of the chief social ameliorations of the day are due to its influence; that some knowledge of science is indispensable in the elementary public school education of to-day. The industrial world has been made what it is by scientific discovery. Its prosperity must depend on the spirit of scientific knowledge among the masses of its workers, and it is only by the practical application of such knowledge to industrial processes that a country can hope to hold its own in the struggle of national competition.

Again, the genius of invention has succeeded in producing by machinery cheap and serviceable imitations of almost every necessary of life hitherto the result of skilled labor; that is, the artisan is daily more and more becoming the servant of automatic

tools. All industries, even the pettiest, tend to centralization in a few hands. In other words, if the work-shop is to hold its own against the factory it can do so only by superior taste and finish, the results of methodical, technical, industrial education and training. It is inevitable that in the struggle for existence the "fittest" will prove to be those who combine intellectual knowledge with the practical knowledge necessary for the production of wealth. The claims of technical education have taken a strong hold on the educators of Switzerland as well as on the broadest and best trained of her public men. They have foreseen the necessity for that delicacy of touch and accuracy of eye (that have made Swiss mechanics, in some departments, the best in the world) to be trained and educated for a supremacy in a field of wider range and more varied scope. This important question is attracting a constantly increasing amount of attention here, and much progress has been made in the establishment of industrial and manual training schools, a review of which it was my purpose to include in this report; but finding that it has already extended to such a length, it is deemed best to reserve for a separate supplemental report technical and industrial education in Switzerland.

EDUCATION IN BRITISH INDIA.

In addition to the statistics of elementary education in India, presented in Table 110, the following information is derived from the latest official report:

Comparisons are instituted with the corresponding conditions for 1881-82, the year in which the royal commission investigated the workings of the education act with a view to devising measures for the improvement of the system.

In 1881-82 there were 3,932 secondary schools for boys, attended by 215,731 pupils; 149,265 attending the English and 66,466 the vernacular side. In 1885-86 these schools numbered 4,083 and the pupils 394,503; 264,918 receiving a purely English education. In 1886-87 there were 4,160 schools and 404,189 students, of whom 271,654 were in the exclusively English division. During the last five years the number of male pupils receiving a purely English education, introductory to a university course, increased 80 per cent., while the number of boys receiving a superior mixed English and vernacular education was doubled.

In 1886-87 the 7,678 advanced private schools were attended by 77,379 students, learning Persian, Arabic, Sanskrit, or some other Oriental classic. The secondary schools for girls, which in 1881-82 numbered only 190, attended by 6,366 pupils, in 1885-86 had increased to 349, attended by 23,904 pupils, and in 1886-87 to 357 schools, attended by 24,904 pupils.

The third and highest division of the Indian educational system, the collegiate section, comprises arts, law, medicine, engineering, and teaching. In 1881-82 the number of colleges in India was 85, the attendance numbering 7,532. In 1885-86 the colleges numbered 110, and the attendance 10,538. In the following year 114 colleges were attended by 11,501 pupils. In 1881-82 the sixty-seven art colleges, English and Oriental, were attended by 6,037 scholars; in 1885-86 eighty-six of these colleges were attended by 8,127, and in 1886-87 eighty-nine colleges were attended by 8,674. There were twelve law colleges in 1881-82, with 739 students. In 1885-86 there were sixteen, with 1,371 students, and in 1886-87 the same number of colleges, with 1,602 students. In 1881-82 there were three medical colleges, with 476 students. In 1885-86 the three colleges had 584 students, and in 1886-87 the colleges were four in number, and the students 654. The engineering colleges, which in 1881-82 numbered three, with 330 students, rose in 1885-86 to four, with 447 students, and in 1886-87 the same colleges had 474 students.

Passing from the statistics of attendance to those of expenditure, in 1881-82 the total cost of public instruction was \$6,435,600. Four years later the total had risen to \$8,304,000, and in 1886-87 to \$8,719,200. At the beginning of the five years the Government bore 39 per cent. of this expenditure, while local and municipal funds contributed 17 per cent., the balance consisting of fees, subscriptions, and endowments. In 1885-86 the share of the Government was 33 per cent., the local and municipal bodies supplied 20 per cent., and the public the balance. The share assigned to local bodies does not entirely proceed from local taxation, as it includes a small sum contributed by the Government.

The governor-general in council considers that the proportion of the growth borne by local bodies should for the future exhibit a more marked increase than it has shown since 1885. There should be a tendency to decrease rather than to increase the proportion now defrayed from the public treasury. Technical education should only be supported by the Government as an extension of general education, while it should promote such technical education of a special character as may be applied to the service of such existing industries as will profit by scientific research, scientific methods, and higher manipulative skill.

CHAPTER XX.

PAPERS ON EDUCATIONAL SUBJECTS.

LIBRARIES AS RELATED TO THE EDUCATIONAL WORK OF THE STATE.

READ BEFORE THE CONVOCATION OF THE UNIVERSITY OF THE STATE OF NEW YORK,
IN THE SENATE CHAMBER, ALBANY, JULY 1, 1888.

By MELVIL DEWEY,
Director of the Columbia College School of Library Economy.

There runs a tradition of our craft "The librarian who reads is lost." Who writes is indeed without hope. How grave his case who tries to make a speech! The modern librarian is too crowded with daily work to bring you carefully rounded periods or polished sentences. He is content if able to make his meaning clear and lodge the thought of his mind in yours.

You listen from year to year to special pleaders. Each man, as a rule, tries to magnify his office, and demonstrate that the topic in which he feels special interest is clearly first in importance. He pleads for vocal music, elementary science, hygiene, gymnastics, ethics, manual training, civil government, drawing. We are convinced of the value of every one, but alas, the list of necessary studies is like art, long, and school life for most of us pathetically short. We are forced mentally to brace against the carefully prepared points of the advocate. For three reasons I ask you to-day to follow me without this customary bracing against extreme views.

1. I do not magnify my office because it is mine, but rather have chosen it as a life-work because unable to escape the conviction of its superlative importance to education.

2. I come to you without carefully prepared arguments, and ask you simply to answer to your own minds my plain but vital questions.

3. Most important, the action to which I seek to lead you, instead of taking more time, means relief to your overcrowded curricula.

What I propose you will see is no entangling alliance, but rather is annexing a continent. Were there time I should speak of the admirable work that has been going on in both east and west for the last five years between the schools and libraries. This has met with hearty recognition, has been often described in print, and is making its way rapidly through the country. But this is only the introduction to that deeper relation and recognition which is in the immediate future.

And let me remind you before we begin that the library for which I speak is one which few of us have seen, except in promise. It is a library at present in its infancy. Remember your own history. "Schools" were old when Paul sat at the feet of Gamaliel and the quick-witted Greeks hung on the words of their teachers in the academy, lyceum, and the porch. But schools like those of which this convocation is the crown are *young*. When in this discussion we speak of schools, we mean that ideal for which we strive, which ought and is to be. Observe the golden rule, and when we speak of libraries picture that ideal which I will briefly sketch. Go back neither to the storied bricks and slabs of Nineveh and Babylon, nor to the myriad MSS. of mighty Alexandria, nor, coming to our own time, to those institutions which in our library evolution correspond to Squeers and Dotheboys Hall.

We have many libraries still which have naught in common with our ideal, except books and the name; many that seem still carefully administered for the least good to the smallest possible number. Our evolution comes after yours. We are not so far advanced. Barely a generation ago the harmless incompetent, fit for nothing else, was set to teach school. But in their dignity and strength most schools have now crowded out the incompetents. The libraries are following, and already the idea is giving way

that men and women, who fail in everything else, and can get neither church nor school, patients, nor clients, are just the ones for librarians. Glance with me a moment at a sample of the old library and the new.

The old was located in an out-of-the-way street, specially inconvenient to the majority who might want it; the building was unattractive, dark, damp, cold, unventilated, and ingeniously inconvenient; many of the books were on shelves so high as to require a ladder, were covered with dust, in shabby bindings, protected often with shabbier paper covers, soiled, torn, and generally discouraged in appearance; unused public documents, old school-books, etc., nearest the door, the more attractive works in the attic or cellar; the shelves unlabelled; the books without numbers on the back, and possibly with none inside, and put on the shelves haphazard as they had come in, or in a classification so coarse that a reader seeking matter on a minute topic might require a week to look over the disorganized mass of literature in which he might or might not find something that he wished; its catalogues and indexes were chiefly conspicuous by their absence, or were so meagre, unreliable, and so destitute of clear grouping that the only way to find what was wanted was to read the whole catalogue. The library was open an hour or two now and then, and closed evenings, holidays, and vacations, for annual cleaning or for almost any excuse—on busy days, because no one had time to come; on holidays, because the librarians also wanted those days for rest. Finally, and most important, the old type of librarian was a crabbed and unsympathetic fossil who did what he was forced to do with an air that said plainly he wished you had not come, and a reader among his books was as unwelcome as the proverbial poor relation on a long visit. It is a sorry picture, but by no means wholly fanciful. In many places those who knew would pronounce it a study from life.

Contrast all this with the library as it should be, and in many cases will be. Placed centrally, where it is most accessible to its readers; the building and rooms attractive, bright and thoroughly ventilated, lighted and warmed, and finished and fitted to meet, as fully as possible, all reasonable demands of its readers; the books all within reach, clean and in repair; those oftenest needed nearest the delivery desk, labelled and numbered; arranged on the shelves so that each reader may see together the resources of the library on the topic which he wishes to examine, kept constantly ready for inspection; with simple and complete indexes and catalogues to tell almost instantly if any book or pamphlet wished is in the building; open day and evening throughout the year, and in charge of librarians as pleased to see a reader come to ask for books or assistance as a merchant to welcome a new customer; anxious to give, as far as possible, to each applicant at each visit that book which will *then*, and to *him*, be most helpful.

These are the facts. The old library was passive, asleep, a reservoir or cistern, *getting in* but not giving out, an arsenal in time of peace; the librarian a sentinel before the doors, a jailer to guard against the escape of the unfortunates under his care. The new library is active, an aggressive, educating force in the community, a living fountain of good influences, an army in the field with all guns limbered; and the librarian occupies a field of active usefulness second to none.

We will speak then of the relation of schools and libraries as they ought to be, and not of the failures of the past.

It takes the world a great while to learn what seems afterward very simple lessons. A happy thought sometimes revolutionizes the common practices of centuries. It comes out as clear as lightning in the darkness and the world recognizes and accepts it, as witness the telegraph and telephone and other modern miracles. Sometimes the new idea crystallizes so slowly that it seems like a geological formation. But whether with swiftness of light or slowness of granite the world moves steadily forward.

I suppose the man who first proposed attaching a wagon to the horse and making him draw that as well as his load was voted as great a visionary as the modern flying machinist. But when on a smooth road he proved that the same horse could draw ten times as much as he had carried, why the wise old world said "the man is right. Go to, now, let us build ourselves wagons." Then the obstructionist (for the dear, dreadful, omnipresent old fossil was surely there) said, "In spite of his proof, the wagons are useless for they cannot run on our bridle paths." And there was truth, as there often is, in the obstructionist's position. But the world that built the wagons has built the roads. And when we remember that the builders have gone on to cross the continent with roads of iron and were not dismayed at the great span of the Hudson at our feet, or at the huge Hoosac bulk which we can almost see beyond the other shore, you will hardly think the task too great to build the road of which I am to give you a bird's-eye view to-day.

If you will follow me you will recognize that without the libraries our schools can do but a fraction of their work. They are horses without wagons, engines without cars, canals without boats, except such skiffs and scows and rafts as chance may throw upon their waters. We must have proper carriages as well as motive power, and then must make suitable provision for broad and straight and level roads.

We are spending our time and money with a freedom of which all the world is proud,

to give our youth in our public schools not much information or culture, but only the simplest tools which, if rightly used, will enable them to educate themselves by reading.

Of old it was only the learned few who could read; most of the world were limited to conversation. Now, we are told this is an art more rare than music, and only the educated few are able to converse; but, except illiterates, everybody reads. Less and less from living voice, from pulpit or rostrum, and more and more from printed page, re people getting their ideas and ideals, their motives and inspiration. The mass of knowledge credited to nature and observation comes most of it, not directly, but through print. The eye, not the ear, is the great gate to the soul. The town-crier no longer rings his bell and shouts his message through the streets. Even if told orally, most readers wish to see "how it looks in print," as an average reader of French wishes to see rather than hear the words. All that is worth knowing soon gets into type. What a boom if such only were printed!

As we study the question, it becomes clear that the difficulty and expense of reaching the people by the voice, and the cheapness and permanence of print make it necessary, if we are to educate and elevate the masses and make their lives better worth living, that we should, in some way, put in their hands the *best* reading. I say best, for reading is not necessarily good or elevating, though it certainly averages much higher than conversation because much greater care is taken in its preparation. Labor and cost bring into activity the law of survival of the fittest. But if good books average higher than good conversation, bad books are more powerful for evil; for when ideas good or bad get into book form, they are apt to become vastly more potent. We have thus a double reason for our missionary work; to give good reading for its own sake and also as the best means to drive out and keep out bad. To teach the masses to read and then turn them out in early youth with this power and no guiding influence, is only to invite the catastrophe. Human fashion, they are quite as likely to get bad as good. The downhill road is ever easiest to travel. The world agrees that it is unwise to give sharp tools or powerful weapons to the masses without some assurance of how they are to be used. Even George Washington got into mischief with his first hatchet.

The children of another generation will see nothing especially wonderful about the telephone or electric light. So we, born to constant sight and use of books, seldom stop to think what a miracle they are. As distinguished from the brute the savage has the divine gift of speech. And when we think that the vibrations of the air started by the vocal chords convey to another the workings of the human soul, we no longer wonder that speech has been looked on as the direct gift of the Almighty, a power too wonderful to have been invented by man. And when, a step higher, the image of his Maker discovered the art of writing, and learned to make spoken words permanent on wood or stone or clay, we do not wonder that the savage worshipped the chip that could talk or the bit of paper that unaided made a complete communication. Has there been anything in the world's history so wonderful as a modern book?

And remember that of late years the printing press has called to its aid graphic methods, color, form, the curves and co-ordinates of geometry and the many photographic processes, so that in many cases the book makes the author's meaning clearer and more easily understood than would be possible for a score of authors with the living voice. In proof of this consult some recent statistical atlas or the profusely illustrated volumes in science. Or take this very point of illiteracy: Here is a map on which is indicated by darkness of shading the amount of illiteracy in each section. Or to be more exact, here is a page with the list of all the States at the left, followed by columns representing each decade of this century, with the dates at the top of the page. Running across this page, opposite each State, is a curved line indicating by its height above the ruling, the percentage in that State that cannot write; for each year the rise and fall of the lines show the fluctuations graphically. A similar line in red opposite the same State in the same way shows the percentage that cannot read. Thus on this single page, at a glance, is told with geometrical accuracy the amount of illiteracy for the whole country; or for any given year, by reading down the proper column; or by reading across, the conditions of any given State during the whole century; or, by consulting the intersections of these columns as on a railroad time-table, the conditions of any place, at any time. No amount of oral statement could begin to give so clear an idea as a few minutes' study of these two pages. Similar methods are being applied to almost every subject of human interest. Recent photographic processes have made exact pictures and all kinds of illustrations so cheap that a modern book, as compared with those of last century, is like a modern lecture on science in which every point is illustrated by experiments performed before the listener or by pictures thrown on the screen by a lantern, when compared with a mere oral statement which, however skilful the word painting itself and however clearly defined in the mind of the speaker were all the ideas of objects referred to, simply *could* not reproduce them as clearly in the minds of the listener.

Emerson says:

"Consider what you have in the smallest chosen library. A company of the wisest

and wittiest men that could be picked out of all civil countries in a thousand years have set in best order the results of their learning and wisdom. The men themselves were hid and inaccessible, solitary, impatient of interruption, fenced by etiquette, but the thought which they did not uncover to their bosom friend is here written out to us, the strangers of another age."

And his friend Carlyle adds:

"Of the things which man can do or make here below, by far the most momentous, wonderful, and worthy, are the things we call books."

Reading is a mighty engine, beside which steam and electricity sink into insignificance. Four words of five are written: "It will do infinite——." It remains for us to add "good" or "ill." What can we do? Good advice and example, encouragement of the best, addresses, all these help, but no one questions that the main work is possible only through the organization and economy of free public libraries. Many have practically accepted this fact without clearly seeing the steps that have led to it. It is our high privilege to live when the public is beginning to see more than the desirability, the absolute necessity, of this modern, missionary, library work.

With the founding of New England it was recognized, though opposed to the traditions of great powers in church and state, that the church alone, however great its pre-eminence, could not do all that was necessary for the safety and uplifting of the people. So side by side they built meeting-house and school-house. The plan has had a long and thorough trial. None of us are likely to question the wisdom of bringing the school into this prominence, but thoughtful men are to-day, more than ever before, pointing out that a great something is wanting and that church and school together have not succeeded in doing all that was hoped or all that is necessary for the common safety and the common good. The school starts the education in childhood; we have come to a point where in some way we *must* carry it on. The simplest figure cannot be bounded by less than three lines. The lightest table cannot be firmly supported by less than a tripod. No more can the triangle of great educational work, now well begun, be complete without the church as a basis, the school as one side, the library the other. The pulpit, the press, and wide-awake educators everywhere are accepting this doctrine. There is a general awakening all along the line. The nation is just providing in the Congressional Library a magnificent home for our greatest collection of books; the States are passing new and more liberal laws to encourage the founding and proper support of free libraries; individuals are giving means for establishing these great educational forces as never before. Witness Walter Newberry's three millions to Chicago, Mrs. Fiske's million and a half to Cornell University, Enoch Pratt's million and a half to Baltimore, Judge Packer's half-million for the library of Lehigh, Andrew Carnegie's proffered quarter-million to Pittsburg, and proudly at the head, greatest of all library gifts, Governor Tilden's five to ten millions left to New York, not to mention the hundreds of smaller gifts which mark the last few years. New, large, and beautiful buildings are being rapidly provided; new libraries are being started at the rate of one to three each week; old ones are taking on new life and zeal; Sunday-school and church libraries are organizing to enlarge and make their work more effective, and a great field of usefulness, at present hardly realized, is opening in this special direction; schools are being brought into direct and active relations with local public libraries. To one studying this great problem, the air is full of the signs of the time. As with the free school, so again, New England leads in free libraries, but her example is being followed with constantly increasing rapidity.

Our fathers had to revise their ideas and introduce the free schools as an essential factor. The time has come when we must revise our conceptions of education, or refuse to recognize very significant facts.

Education is a matter of a life-time. We provide in the schools for the first ten or fifteen years and are only come to the threshold of seeing our duty to the rest of life. We begin to see that the utmost that we can hope for the masses is schooling till they can take the author's meaning from the printed page. I do not mean merely to pronounce the words or pass the tests for illiteracy, but to *understand*. Observation has convinced me that the reason why so many people are not habitual readers is, in most cases, that they have never really learned to read; and, startling as this may seem, tests will show that many a man who would resent the charge of illiteracy is wholly unable to reproduce the author's thoughts by looking at the printed page. And even with this tremendous modifier of the real number of readers we lose ground. I am no pessimist. I have no sympathy with croakers. I am proud to the last degree of the great work that is being done. But we cannot shut our eyes to the census. In 1870 fifteen per cent. of illiterates seemed an ugly item, but it had grown to seventeen per cent. in 1880, in spite of all our millions and all our boasts. Of the children of school age in this great State, how pitifully few get beyond the grammar school? And of those who become academic pupils, how many enter college? And to the saving remnant that graduates from college, how much of the knowledge of after-life came from schools and how much from

reading? We must face the facts. We must *struggle* to teach our masses to read in our schools. Then they must become bread-winners; and if we carry on their education we must do it by providing free libraries which shall serve as high schools and colleges for the people. Our schools, at best, will only furnish the tools (how rudimentary those tools for most people now), but in the ideal libraries, toward which we are looking to-day, will be found the materials which, with these tools, may be worked up into good citizenship and higher living. The schools give the chisel; the libraries the marble; there can be no statues without both. As this fact becomes more generally recognized, the time draws nearer when the traveller will no longer ask *have you a library*, but *where* is the library, assuming its existence as much as he now assumes that there must be a church and school and post-office.

But if the library is to do the ideal work that we have in mind it must have some of the ideal qualities on which such work depends. This means a library differing materially from both the types most familiar in the past, which we may call storage and recreation libraries. The first is a store-house, a cistern, an arsenal, mediæval in its spirit, a literary miser, always getting in, seldom giving out. It was for holding and preserving, and not for use, and is best illustrated by the miser who gets gold not to spend, but merely for the satisfaction of possession. The European libraries are largely of this character, as are most State and government collections.

The recreation type is a mental candy shop, and at the other extreme in every feature. It is wholly for use, but the use is wholly for amusement. It could be illustrated by a school that taught only games, or a hotel that in its dining-room served only sweetmeats. It has, to be sure, some excellent books, but supplied to meet the taste of its pleasure-seekers, as the confectioner gives those who wish it a bit of good bread to eat with their ice-cream.

Surely every library ought to have an ambition to get and preserve books, and surely some place should be found in every general collection for fiction and humor. These ought, however, to be the embroidery, and not the web. A circulating library, run as a business, will of course take on the latter character, and supply whatever will be most readily taken by its customers. But the library in which we are interested to-day combines the good features of both these with others of its own, and is the institution that deserves the name of people's university. It might well copy that broad legend from the seal of Cornell, "An institution where any person may find instruction in any study." Perhaps we should more clearly recognize its proper functions and be in less danger of confusing it with old ideas if we called it not a "library," but a "people's university."

To the making of such a library many elements contribute. A building will not do it, though it be as beautiful as the Taj and as great as the Coliseum. Money and books, though essential, will not of themselves make such a library. I recall visiting a magnificent building on which about a million dollars had been spent. In it were many valuable books. It was in a great city, and a thousand readers daily ought to have found their way through its open doors. When I looked with surprise at the four or five readers who seemed lost in its superb rooms, my witty friend, the chief librarian, said, "Why, there is hardly a day passes that some one does not come into this library."

And I recall a similar illustration which came under my personal knowledge. The detective force of a great city were in hot pursuit of a man who thought it impossible to hide from them. A literary man, to whom he had done a favor, undertook successfully to secrete him through the entire day, and after dark he escaped. The place chosen, where he would be least exposed to recognition from chance observers, was in the public reading-room of a great library, which, like the one before mentioned, was famous for the number of people who did not go there.

We have no time to-day to go into the questions that determine a library's measure of success. Mere mention of heads must suffice. Its location should be central and accessible to all. Its building should be comfortable and convenient. Grandeur plays no part in usefulness. Its hours of opening should be long, for the people's university, like the town pump, should seldom be closed to those needing it. The regulations should be liberal, with as little red tape as is consistent with the safety of the books. It goes without saying that books, pamphlets, and serials should be well selected and as liberally provided as means allow. It would be hard to find a library in which from ten to fifty per cent. of its books could not be replaced with others more valuable for its use. In fact it is common to find collections where, if the very best could be chosen from the open market, one-quarter the number of books would have more value than the whole miscellaneous assemblage. After the book come the little-understood catalogues, classification, and analysis, which vastly increase their practical value.

Only those with special experience can understand how essential to any high success are such appliances. Working in a library without them is like trying to find a score of men in a great city without a directory. You may chance on some one who knows the man you seek and can direct you to him, but the chances are that you will have a long disheartening search and perhaps fail entirely to find him.

Finally, and perhaps more important than all the rest, is the librarian. If he can furnish inspiration and guidance to the readers who seek his help then may we indeed look for a true university, whether large or small, for the small library should have all the high ideals of the large with the best of their books.

And such a library is the real university for the scholar as well as for the people. Of old the pupil was continually with the teacher, and from his lips learned the sought-for wisdom; but the printing-press has revolutionized all this, and to-day many an earnest disciple has never seen the face nor heard the voice of his master, but has received all his teachings through the printed page. The "new education" is chiefly distinguished by substituting the library for the text-book and dogmatic lecture. Seminaries are springing up in the best colleges in all departments. Students are taught to work in the library as the main object of their course, and when one is able to use skillfully a large bibliographical apparatus and to get quickly and accurately from a great library what he needs, he may indeed claim to have a good education.

Of late years the college library has been taking an entirely new position. Of old it was attached to the chair of some overworked professor or put in charge of the janitor and opened four or five hours per week in term time only. Now it is being raised to the rank of a distinct university department; there are professors of bibliography, of books and reading, and at Columbia we have for the first time a chair of Library Economy. The libraries are being made as accessible as the traditional college well, some of them opening from 8 a. m. to 10 p. m., including all holidays and vacations; they are receiving endowments, *e. g.*, the million and more to Cornell University. Professor Horsford's great gift to Wellesley, Judge Packer's half million to Lehigh, and the long list of funds given to Harvard, the Phoenix gift to Columbia, and so I might go on with hundreds of illustrations. New and beautiful buildings, some fire-proof, all vast improvements over what was thought sufficient in the last generation, multiply; Harvard, Brown, Amherst, Dartmouth, Oberlin, Yale, the Universities of Michigan, Vermont, and Pennsylvania; in this State Cornell, Syracuse, and Madison Universities, and so on. In New York City alone three splendid collegiate library buildings have just been finished for the General Theological Seminary, Union Theological Seminary, and our own at Columbia, which has cost over four hundred thousand dollars, and already we plan an enlargement. The colleges are waking to the fact that the work of every professor and every department is necessarily based on the library; text-books constantly yield their exalted places to wiser and broader methods; professor after professor sends his classes, or goes with them, to the library and teaches them to investigate for themselves, and to use books, getting beyond the method of the primary school with its parrot-like recitations from a single text. With the reference librarians to counsel and guide readers, with the greatly improved catalogues and indexes, cross-references, notes, and printed guides, it is quite possible to make a great university of a great library without professors. Valuable as they are in giving personal inspiration, they can do little in making a university without the library. Just as truly as we found in popular education that the real school for the mass of people, and for all their lives except early childhood, was the library, so in the higher education the real university is a great library thoroughly organized and liberally administered.

What we need now in higher education is not more colleges, but more libraries. Railroads have largely annihilated space, and for the preliminary training it is easy to send our boys and girls a few hundred miles to college; but for the training that must be carried on all through life they need the people's university close at hand where it may be reached without serious interruptions of regular pursuits. It is like the post-office and market compared to the registry of deeds. One does not object when he buys an estate to go a long distance to record his title, but when he wishes to mail a letter he insists on having a post-office at hand. Higher education therefore demands new libraries at accessible points throughout the State, and their wise and economical establishment requires guidance and supervision such as the regents of the university can best supply. State after State has partially recognized the claim of the library by passing laws allowing communities to tax themselves for its maintenance, and the time has come when the recognition of its true place must be made complete. If New York will not now lead, as is her wont, at no distant day the greatest of the States will have to follow.

If time allowed, I should like to sketch to you the recent development of the modern library idea. I merely mention the great steps, referring you for fuller information to the Library Journal, Library Notes, and the circulars to be had on application at the Columbia Library School. We date active progress from 1876, when, after a four days' successful conference in Philadelphia, the American Library Association was organized. It holds annual meetings, marked among conventions by their practical work and enthusiasm. The same year we started an official monthly organ, the Library Journal, now in its thirteenth volume. Shortly after followed that most important practical factor in the library work, the Library Bureau of Boston, which undertakes to do for libraries such work as is not practicable for the association or magazine. It equips large or small

libraries with everything needed (except books and periodicals) of the best patterns devised by or known to the officers and committees of the association, of which it is the tangible representative for manufacturing and distributing improved appliances and supplies. It secures trained cataloguers and assistants or finds positions for those out of employment, gives technical advice in its consultation department, and in all practicable ways fosters library interests. Ten years after the *Journal*, which, because of its limited circulation, barely pays expenses at five dollars a year, came its co-laborer, *Library Notes*, a quarterly magazine of librarianship, specially devoted to the modern methods and spirit, and circulated widely because of its low price. Last of the great steps came the school for training librarians and cataloguers, which two years ago was opened at Columbia College through the same influence which had before started the association, *Journal*, *Bureau*, and *Notes*. You who appreciate what normal schools are doing to improve our teaching will remember that librarians need a training school more than teachers, who have had the experience of their own school life as a pattern, for librarians till two years ago never had opportunity for training and came to their work like teachers who had been self-taught, and not only had no normal school advantages, but had never been in a school or class room even as pupils. As evidence of the growth of the idea, we may note that this library school, which began two years ago with a twelve-weeks' course and provision for five to ten pupils, has in two years developed to a course of two full years with four times as many students at work, and in spite of the rapidly increased requirements for admission is to-day embarrassed by five times as many candidates as it can receive. This means a recognition of the high calling of the modern librarian, who works in the modern spirit with the high ideals which the school holds before its pupils. Of this work I said recently to the collegiate alumnae:

"Compare this work with that of the clergyman or teacher, whose fields of usefulness are universally put in the first rank. The clergyman has before him for one or two hours per week perhaps one-tenth or one-twentieth of the people in his parish. Not so many, indeed, when we remember how there are often little struggling churches of a half-dozen denominations, where one strong church could do all the work much better. Beyond this very limited number for this very limited time, the clergyman is dependent on the slow process of personal, parochial calls. I yield to none in my appreciation of the great work which he does, and do not forget the constant stream of good influences coming from his daily life, and the many direct efforts he puts forth; but I am speaking now of his work as a preacher, and of the limits which circumstances seem to set to it.

"The teacher has a larger proportion of her constituency in the earlier years, but only for a few hours a day and only in the months when schools are in session. It constantly happens that just as she becomes deeply interested in a bright, promising boy or girl, and feels that here is an opportunity to develop a strong character by patient work, the child comes and says, 'I am not coming to school any more; I am going to work in the factory,' or, 'I am going to help mother at home.' For the great majority the work of education is hardly begun before the necessities of life take them away from the teacher's influence.

"But the earnest librarian may have for a congregation almost the entire community, regardless of denomination or political party. His services are continuous and in the wide-reaching influences of the library there is no vacation. When a bright boy or girl has been once found and interested and *started*, he is almost sure to continue under these influences all his life. It has been found entirely practicable for a skilful librarian thus to reach and interest people who have never been in the habit of reading; to lead readers into new and more profitable fields, and to create a thirst for better books. In fact the number of ways in which people can be helped is only equalled by the power and lasting character of this influence which comes from good books. Recognizing these facts there are preachers who are looking to the adoption of the library profession as a way to spread the Master's word even more effectively than in the pulpit; and there are teachers whose whole hearts have been given to the cause of popular education, who are eager to enter this newer field, because they recognize in it a still wider opportunity."

Is it not true that the ideal librarian fills a pulpit where there is service every day during all the waking hours, with a large proportion of the community frequently in the congregation? Has he not a school in which the classes graduate only at death?

Much is already done, and while the work is in its infancy, it is an infant so vigorous as to leave no fears of its manhood. A last great step remains to be taken, and to-day and here it ought to be begun. The State long ago recognized its school system as one of its bulwarks, and fosters it with yearly increasing expenditure. Now it must recognize educational libraries as necessary companions of the most successful schools. This eminent body represents the higher education of the Empire State, which the regents of the university are charged with fostering. Tell me if you think they can, without taking action, face our facts that the best reading more than the schools give education to our people; that the colleges provide for only the trifling minority who can afford time and money to share in their great advantages; that the influence conceded to be the

most potent is left without guidance, supervision, stimulus, or support. When inspection shows that a school has attained a certain standard, it is honored by being made a "regents' academy." Can we do less than give similar inspections to libraries, and when one is found doing the high work at which we have glanced to-day, honor it by making it a "regents' library," and by virtue of success in its high calling, a member of this convocation which represents the institutions that give New York its higher education? What greater stimulus can we place before our growing libraries than such certain and official recognition of superior work?

Many advantages are sure to spring from entering wisely on this course. I do not advocate undue haste. The essential thing is to recognize the principle and then meet year by year the growing demand for advice and inspiration. There need be no obligatory supervision. A library secretary would soon have more requests for advice and help than he could well answer. New communities are constantly waking to the need of libraries, and would be deeply grateful for wise advice as to the best means of developing interest, raising money, selecting, cataloguing, and circulating books, and the thousand details which make or mar success. It is well known to the experienced that the same money can be made to do double good under wise administration, and yet for lack of just such help as could be afforded at a cost to the State too trifling to be worth mentioning, many a community either fails to secure its library, or fails to get from it all the good that the time and money could be made to yield.

There are few topics where technical knowledge and experience are so important as in establishing and administering successfully a library of the highest grade in its ideals, even though its income be small and its books comparatively few. It requires no vivid imagination to picture the practical value to the State if any town, about to found a new library or improve an old one, could come to the regents and have, without charge, the best guidance for its case that the combined experience of the library world had yet worked out. Time allows me only to lodge the thought in your minds. No expensive machinery is required. A single salary, with a hearty recognition of the work, would start it creditably.

Such an officer would soon find money and books placed in his hands by those wishing to give them where they would do most good, and recognizing his superior facilities for wisest distribution. The excellent results that have become notable from the regents' school examinations would be duplicated in good effects on library interests by competent inspections, reports, and suggestions to such libraries as wished them. New York's splendid collection, the best owned by any State library, is about being moved into these adjoining rooms, which are admirably adapted for the focus of State library interests and the central people's university. The regent's office is ideally fitted to be the centre of a system of university extension, such as is marking an era in the great English universities, and carrying to all parts of the kingdom the learning of Oxford and Cambridge and the other great schools, and for the first time giving them a practical connection with the lives of the masses, and making them a new and mighty force in working out higher standards of good citizenship. This work naturally centres at local libraries. Fellows and teachers from the colleges go out for a trifling fee, to distant towns, to give courses of ten to twenty lectures on political economy, history, literature, science, or art; indeed, the whole range of the university curriculum is open. With the lectures are given references to the best books to be found in the local libraries, and the common people hear them gladly. Interest is aroused. Many are led to read and learn more than has been told them in the lecture. Those most interested meet for discussion and further instruction, and the practical results have been so much beyond expectation that the universities are allowing work of this kind to be credited as a part of a university course leading to a degree. This means that many a man who would otherwise spend his time idling about saloons, secures instead a higher education worthy the name. Cambridge alone, I am told, has carried on over six hundred of these admirable university extension courses in the past ten years.

Do I hear some one say that New York has tried the scheme of libraries for the State and that it has failed? With that story I am familiar. We have learned by experience what not to do. Every great movement is apt to succeed only through repetitions and failures. The district school system failed because too widely dissipated and because it had no supervision such as I have merely hinted at to-day. Who could expect twelve thousand libraries to be administered successfully in a State where there were not twelve men that could be fairly said to be thoroughly fitted for the work?

The great State of New York led all the rest in recognizing, many years ago, the importance of good reading and in trying to meet the want. Seventeen other States followed its example, and we are proud of our leadership. To-day State after State has left New York behind. More than once in our national library conventions have we of New York been forced to hear her slightly spoken of because she was doing so little modern library work. But no State has yet given recognition to all that this new work implies.

If New York will again rise to the occasion and officially recognize the library as a part of its system of higher education and give to libraries of the highest type as fast as they reach the standards a seat in this convocation as being in fact as well as in resolution co-workers with the colleges and the universities, then again shall she wear her crown of leadership. If she fails, before many more meetings some other State will have seized the opportunity that now is hers.

Gentlemen of the convocation, it is to-day your high privilege to lead. To-morrow it may be your bounden duty to follow.

HIGHER EDUCATION IN THE NORTH-WEST TERRITORY.

BY GEORGE W. KNIGHT, PH. D.,

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[Read before the American Historical Association, at Washington, December 27, 1883.]

Many of the members of this association have learned with pleasure that the National Bureau of Education, under the direction of the present Commissioner, Col. N. H. R. Dawson, has authorized the preparation and undertaken the publication of a series of monographs upon the history of higher educational work in the United States. This important undertaking, when completed, should be of great value to all who are engaged upon or interested in the growth and progress of American colleges and universities in general, their objects, scope, and success, their relations to and influence upon popular education on the one hand and upon the advance of higher educational ideas and attainments on the other; and finally, the results of these studies should throw much light upon the question, already broad and constantly broadening, of the relations and duties (if such there be) of the Nation and the State, under our democratic form of government, in the control or maintenance, at public expense, of higher educational institutions.

Heartly thanks are due to Commissioner Dawson for this work, and also to Dr. H. B. Adams, who has prepared the first two monographs in the series and who is exercising editorial supervision over the others.

The work in various States has been delegated to different men, and it having fallen to the writer of this paper to prepare the material for some of the States of the old North-West Territory, it is proper to announce that the following paper is of the nature of an essay, introductory to the history of the higher educational development in those States, based upon the writer's investigations and monographs upon the other States of the territory, not yet published, the manuscripts of which he has been permitted to examine.

INTRODUCTORY SKETCH.

It is necessary in entering upon the discussion of a subject having no invariable and universal meaning either at all times or in all places at the same time, that the scope and signification of the subject be indicated at the outset. Higher education is a term of this sort, having a very different signification to-day from that of fifty years ago. Even to-day the term, at least as practically applied, comprehends something quite different at Cambridge, or Baltimore, or Ithaca, or Ann Arbor from that at Hiram, or Battle Creek, or Chaddock, or fifty other places in the country.

Without then attempting to set the exact bounds of the term, for purposes of historical study it is within limits to consider the work of all those institutions calling themselves colleges or universities and conferring the traditional baccalaureate degree or some modern variation, but to study in greatest detail those institutions which have unceasingly striven to embody the true university spirit, and whose strivings and achievements have had a more or less noticeable influence in giving shape and character to the higher education of to-day.

The five States of the North-West Territory present features of exceptional interest and importance in the history, development, and attainments of the American higher education. Not that higher educational facilities have developed more rapidly or advanced ideas have spread faster and more widely than elsewhere in the United States, but that owing to certain facts peculiar, in a considerable degree, to the history of the territory, definite results have been attained and tendencies have been started that are exerting important influences outside the limits of the North-West Territory.

These facts may be briefly indicated:

First.—It was in connection with the organization of this territory that the Congress

of the United States first made grants of land for the endowment of educational institutions both primary and higher. Thus the question immediately rises as to the original design of Congress in making these endowments and the influence and effects of their action upon the development of educational policies.

Second.—The territory contains probably the weakest college in the United States that is classed as a State institution, and is controlled and nominally supported by the State; it also possesses the strongest and most successful university in America that has from the outset been controlled by the State and sustained *solely* by a national grant and the proceeds of State taxation. In consequence a study of the history of the territory should disclose some of the conditions precedent to the establishment and successful maintenance of direct relations between the State and the higher education.

Third.—The territory contains a State which has in operation more colleges than any other member of the Union; while in another State of the territory policy and public sentiment have apparently tended to check the founding of numerous colleges, while they have favored and fostered a few, and notably the State University and State Agricultural College. A study of this phase of the history of the territory ought to assist in answering the oft repeated query whether the progress of the true higher education is in any marked degree dependent upon the number of colleges within a given area of territory.

Fourth.—The territory as a whole—the five States now composing it—show in their history the gradual but steady development of the idea that the interests of the State and of education are conserved by a liberal and hearty support of a State university, controlled by public officers and relying not upon private endowment but upon public grants and appropriations for their income. There has been a slow but marked disappearance of the doctrine of *laissez faire* as applied to higher education and the appearance in its place of the idea of the advisability if not the duty of State support and centralized effort. Not that a State university is to be established and maintained at the expense or detriment of private sectarian or non-sectarian colleges, or with the remotest thought of supplanting them, but that the public education of the youth of a State begun in the common schools scattered throughout the State, continued in the high schools less numerous and for the most part confined to the cities and towns, may properly be completed, for those who desire to avail themselves of it, at a State university equipped for undertaking such collegiate, university, and advanced special and professional instruction as the collective will of the people may direct.

Much of the history of higher education in the North-West was, however, enacted before this idea had received any extensive development or was involved in its development, and the chief preliminary inquiry to be made in an historical study of the subject is, "By what theories and upon what bases have the colleges and universities of the North-West been organized?" The chief purpose of this introductory sketch is to afford a general, and it is hoped satisfactory, answer to that inquiry.

The fact that is apt first to impress the most casual observer of educational matters in the North-West is the existence of a surprisingly large number of colleges in the five States in consideration. The second fact to attract his attention is the unequal distribution of those colleges among the five States. His next discovery, if he continues the examination, will be that in each of the two States that contain far less than their proportionate number of colleges there is a large and strong State university. In order that these facts may be more clearly evident a few statistics must be given here.

There were in operation in the five States of the North-West Territory in 1886, 93 colleges and universities, conferring degrees, including 5 scientific and technical institutions. There were also 26 institutions for the superior instruction of women, the majority of them conferring degrees, making a total of 119 higher educational institutions, not including any strictly professional schools unconnected with colleges or universities proper.

Of the 93 colleges then in operation 1 was in existence in 1810, 2 in 1820, 7 in 1830, 20 in 1840, 33 in 1850, 53 in 1860, 77 in 1870. Of the 26 women's colleges and seminaries 1 was in existence in 1830, 5 in 1840, 11 in 1850, 19 in 1860, 21 in 1870. Many other so-called colleges have been established that after a fitful career have disappeared leaving no traces except a few graduates and considerable indebtedness. In Ohio, for example, 14 universities and 42 colleges were chartered before 1860, of which but 22 are open to-day, showing the death of 34 colleges in that State alone, or more than are living in any other State to-day.

The foregoing statements show, by a little comparison, that the old North-West Territory contains more colleges and universities than are to be found to-day in the thirteen original States of the Union, omitting Georgia and South Carolina, and that if the same ratio according to population obtained as in the eleven original States, the North-West would have but 56 instead of 93 colleges.

Of the 93 colleges 34 are located in Ohio, 16 in Indiana, 25 in Illinois, 10 in Michigan, and 8 in Wisconsin.¹

Of these, 9 are in fact or in name State institutions, more or less closely connected with the State, distributed as follows: Ohio, 3; Indiana, 2; Illinois, 1; Michigan, 2; Wisconsin, 1. Of the remaining 84, 11 are non-sectarian in their organization, of which 7 are located in Ohio, 1 in Indiana, and 3 in Illinois. Seventy-three are under the control or patronage of various denominational or sectarian organizations, as follows: In Ohio, 24; in Indiana, 13; in Illinois, 21; in Michigan, 8, and in Wisconsin, 7. Of the institutions for the higher education of women 7 are non-sectarian and 19 are under the patronage of religious denominations.

Without counting the institutions for the higher education of women Ohio has more colleges and universities than any other State in the Union; Illinois, if she possessed one more college, would rank second, while Indiana holds the seventh place among the States, Michigan twelfth, and Wisconsin sixteenth.

Any adequate interpretation of the history of the higher educational movement in the North-West must explain the causes producing this great diversity in the number of colleges in these States, for it is not accidental nor unimportant. In tracing out such an explanation it will be convenient at the same time to dwell upon the changing relations of the State to higher education, not because the two phenomena are necessarily interdependent (though some may be disposed to consider them as different results of the same set of causes), but because in this way the necessity of twice traversing the field will be avoided.

Down to a point well along in the present century the almost universal belief was that the care of higher educational concerns belonged to and should properly be left in the hands of religious organizations; and the practice corresponded to the belief. Indeed, the recognition of the duty of the State to provide any free and public educational facilities of the lowest type hardly antedated that period in some parts of the country. Ohio was not worse than other States in this regard; yet Ohio, admitted to the Union in 1803, had been a State for twenty years before a tax for common school purposes was authorized; nearly twenty-five years before it was made the duty of the townships to provide schools, and nearly forty years before any State school fund was provided other than that arising from the Congressional land grant. When Ohio was settled a separate department of education in either State or National Government, unless the writer is grossly misinformed, was unknown in American statecraft. As for the higher education there was at that time no college in operation in America directly subject to State control. A few colleges had received gifts of money or land from the legislature of the colony or State in which they were situated, but they were essentially private colleges so far as their management and policy were concerned, and perhaps the majority were under denominational patronage. Washington, Madison, and a few others desired the foundation of a great national university, and Jefferson had begun his long struggle for a State university in Virginia; but the idea was not often advanced, and was less often accepted,

¹ Colleges in existence.

States.	1810.	1820.	1830.	1840.	1850.	1860.	1870.	1886.
Ohio.....	1	2	5	10	15	22	24	34
Indiana.....			2	6	7	12	14	16
Illinois.....				3	5	11	22	25
Michigan.....				1	2	8	9	16
Wisconsin.....					4	5	8	8
Total	1	2	7	20	33	53	77	93

Women's colleges in existence.

States.	1830.	1840.	1850.	1860.	1870.	1886.
Ohio.....	1	4	7	10	10	11
Indiana.....				1	1	2
Illinois.....		1	4	5	7	9
Michigan.....						1
Wisconsin.....				3	3	3
Total	1	5	11	19	21	26

that either Congress or the State should take any active part in the support or control or even regulation of higher education.

The grant of lands by Congress in 1785 and 1787 for the support of common schools and a university in the North-West Territory has often been regarded as a definite and conscious departure from these old educational traditions. This position has never been substantiated. On the contrary, it seems to have been established beyond question by recent investigations that, so far as Congress was concerned, whatever may have been the ultimate aims and hopes of individuals, the grant of two townships to the Ohio Company in 1787 for a university "to be applied to the intended object by the Legislature of the State" did not constitute the deliberate adoption of a policy of "national aid to higher education." It was on the part of Congress merely a business transaction, and there is no evidence that it was considered by any one at that time as a measure likely to be influential in giving shape to the educational policy of Congress or any future State. Neither is there evidence that Parsons or Cutler, when they advocated and obtained this grant, had developed any novel theory as to its future use. Rather, as their ancestors had early laid the foundations of a college at Cambridge, and had obtained assistance from the general court, so here in the "later New England" they desired to plant a local college, and with characteristic shrewdness discovered that its original endowment might easiest be obtained from the national landowner. Through the precedent forced upon the Government by these shrewd New Englanders Congress drifted into the policy of endowing a college or seminary of learning in each new State.

It has been assumed or asserted by later generations that, after it had been decided that the grant of lands should be made, it was the well-defined intention of all concerned that the institution eventually receiving the benefit of this endowment should be in a broad sense a State institution closer in its organic relations to the Government and people than a college on a private foundation. Careful investigation has shown this assumption to be erroneous. The idea of State support, regulation, and control of a college or university, involving a wide departure from prevalent theories, was not so suddenly and easily implanted in the West.

The only conditions attached by Congress to the grant of land were (1) as to the location of the grant, and (2) that it should "be applied to the intended object by the Legislature of the State." The grant itself and both these conditions were inserted in the contract at the request of Dr. Manasseh Cutler, the agent of the Ohio Company in the transaction. But for his persistency no grant would have been made for a university at that time. Consequently, his views concerning the nature of the university, if ascertainable, should determine conclusively this important point. His grandson says: "Of all the plans for the future involved in the purchase this one of a university was, perhaps, the favorite with Dr. Cutler." (*Memoirs of Manasseh Cutler*, II, 33.)

Until 1799, twelve years after the contract was made and settlements begun by the Ohio Company, no steps had been taken to organize the university. In the years 1799 and 1800 a correspondence touching the university was carried on between Dr. Cutler, then resident in Massachusetts, he never having removed to the West, and Rufus Putnam, in Marietta. The recently published memoirs of Dr. Cutler contain the entire correspondence, and portions of it had been published previously.

February 3, 1799, Gen. Putnam wrote to Dr. Cutler giving a few suggestions concerning the proposed university, and concluding: "I hope you will give me your opinion, or rather a systemized plan applied to our circumstances and the objects we have in view."¹ July 15 Dr. Cutler responded: "I have attempted to throw my ideas on paper * * * but I have not been able to mature my mind sufficiently to satisfy myself, and am sure I should not be able to satisfy others. * * * So far as I have had opportunity I have consulted the charters of public seminaries in Europe and America. Those in our own country are the most modern and best adapted to the purposes intended."²

August 7, 1779, General Putnam again urged Dr. Cutler to send on his plan, writing as follows: "This request I must again renew, and by a systemized plan, I mean a bill in form of an act, or law, incorporating A. B., C. D., etc., and defining their powers, accompanied by such remarks as you may think proper to make. We are totally destitute of any copy of an incorporating act, or charter of a college, or even an academy; but this is not my principal reason for applying to you. It is a subject I know you have long thought of, therefore I request of you not only the form, but the substance."³

June 30, 1800, Dr. Cutler wrote to Putnam enclosing a "Charter of University" which he had drawn up for the proposed institution, accompanied by a long letter in the nature of a commentary on each of its sections. This charter, which was in form for adoption by the territorial legislature, provided in substance for the creation of a body politic by the style of "The Board of Trustees of the American University," composed of eleven men to be named in the act of incorporation. The power of perpetuating the

¹ *Memoirs of Manasseh Cutler*, II, 19.

² *Ibid.*, 20, 21.

³ *Ibid.*, 21, 22.

board was vested in the trustees; they were given authority to establish a university and to determine and regulate its policy and government; the two townships of land were to be turned over to the corporation, which was to have full power "forever hereafter," to have and rent the lands for the benefit of the university, and to apply the income as the trustees should direct.¹

From the foregoing several things are to be noted: (1) Twelve years after the Congressional grant had been made, the man at whose solicitation it had been given—a man of broad culture and wide information—had not yet determined to his own satisfaction how the university should be organized. (2) His plan when finally completed created merely a private corporation such as would be created for any college, and made it a close corporation. (3) To this corporation he would give full and absolute control over the Congressional grant, save only that the lands should not be deeded in fee by it. (4) The amount of property that might be held by the corporation was to be limited as in most private corporations. (5) No right was to be reserved to the Territory or the State to modify the charter at any future time. (6) In no manner, either directly or indirectly, was there in this plan any specified or implied recognition that the institution when once created was to occupy any different position in the State or relation to the people than that filled by any other private college.

The inevitable conclusion is that in 1787, when the grant was made, the idea of establishing a State university had not been conceived by the projectors of this institution, and that by the clause in the contract that the two townships of land for a university "be applied to the intended object by the Legislature of the State," it was merely intended that the Legislature should hold the lands as a temporary trustee until it should have chartered some university and bestowed the lands upon it, after which the institution should be merely a private corporation, and the duty of the State in the premises should cease.

Two years after Dr. Cutler had drafted and sent on his proposed charter the territorial legislature passed an act establishing a college, and giving to it in trust the two townships. This act of incorporation was in the main the one prepared by Dr. Cutler, but with sundry modifications that radically changed the scheme of its polity. The first trustees were named in the act to serve during good behavior, but their successors were to be chosen by the Legislature of the Territory or State, whenever vacancies occurred. No limit, as in the case of private corporations, was placed on the amount of property that might be held by the corporation. The Legislature specially reserved the power to extend or diminish the powers granted to the trustees, "as shall be judged necessary to promote the best interest and prosperity of the said university."

These changes from the plan of Dr. Cutler, which some writers have thought unimportant, modified *in toto* the legal relation between the State and the college. Instead of becoming one among many private colleges, the institution was from a legal standpoint brought under State supervision. It does not appear, however, that at that time it was contemplated that the State would ever be called upon to assist in sustaining or enlarging the college, or that it would be connected with any public system of education. The naked legal relation was established, and nothing more. Future support and control by the State was made possible; that it was contemplated is hardly probable. Why, and by whose influence the plan of Dr. Cutler was modified, as indicated, does not appear. Should this point be determined it will supply an important link in the historical chain. In its absence it is reasonable to infer, since Dr. Cutler, the chief promoter of the college, contemplated the establishment of an institution subject to private control, and since educational sentiment in the settled parts of the country favored private colleges, in fact, hardly conceived of a college on any other basis, that the Legislature did not intend to found a State university in the sense that that term is employed to-day.

After Ohio became a State, the Legislature passed an act rechartering the university. This act, similar in all important respects to the territorial charter of 1802, changed the name of the institution to Ohio University, located at Athens, and existing to-day as the oldest college in the North-West Territory. Miami University, founded upon another Congressional grant of land within Ohio, was organized a few years later upon a basis similar to that of Ohio University.

While these two institutions were closely related in their legal status to the State, there was no general public sentiment to sustain and make more prominent that legal relation. They were looked upon by the people of the State as mere local colleges, and it is doubtful if their semi-public character was generally understood or known. They appear to have been considered as no better, no worse than other local colleges which soon sprang up.

Ohio, while its first settlers and its organic laws came mainly from New England, soon contained settlements from various parts of the country, and, what is more important in its educational history, embraced adherents of almost every denominational variety of

¹ Memoirs of M. Cutler, II, 22.

Christianity. Accustomed to the prevalent ideas in the East, as the adherents of these various sects became more numerous in Ohio, first one and then another established an academy, a college, and perhaps a theological seminary for the education of its sons, and eventually of its daughters. Each denomination felt that its children should be educated in an institution controlled by its own church or at least not in one controlled by any other sect or by no sect. Religion and higher education having usually gone hand in hand in the older States, it was natural that they should in the new. If there were few colleges in New England, they argued, it was because there were few religious sects. In the broad State in the West, where all nationalities and all shades of religious belief were finding an abiding place, separated as they were from the older colleges of the East, each denomination felt it an imperative duty to establish a college, and of course with it an academy or preparatory school. Local pride, too, often contributed to establish a college in one town because there was one in a neighboring town. Occasionally a non-sectarian college was founded solely in the interest of liberal culture and training, but such were few. The two State colleges which had been established were hardly mentioned outside their immediate localities, and public sentiment, as reflected in the Legislature, entirely neglected them. Indeed, each of these institutions was dominated for a time by a prominent religious sect.

Every student of history has noted how tendencies, prejudices, or modes of action once thoroughly started in a community or a State, continue to exercise a powerful sway long after the reasons for them have disappeared or lost their force. In Ohio, for example, there is still a peculiarly strong and sensitive opposition to any suggestion of bestowing the veto power upon the Governor; simply because the territorial Governor nearly ninety years ago abused that power shortly before the State constitution was framed, and, as a consequence of the temporary anger of the people, the State constitution was framed withholding the veto power from the Governor.

So the theory that the existence of an extremely large number of colleges is essential to the interests of the people and to the cause of higher education, regardless, apparently, of the character, scope, and thoroughness of the institution, has perpetuated itself in Ohio. In that State to-day the law governing the incorporation of colleges is substantially that in force for the last forty years, and under its provisions any five persons may associate themselves, and, by filing with the Secretary of State articles setting forth the name, location, and object of a proposed college or university, shall receive a certificate of incorporation entitling them to all privileges and powers usually exercised by a college. There is no specification or limitation as to the nature of the courses of study or degrees to be granted and no supervision by the educational department of the State. These laws have facilitated the founding of colleges. Have they tended to insure the stability and prosperity of the institutions founded under their provisions?

Extending investigation over the entire territory it is seen that the five States separate themselves into two groups. The southern tier, consisting of Ohio, Indiana, and Illinois, was settled first and the population and institutions of the three States appear to have been mainly of a similar origin. They became States at dates so slightly separated that the same set of causes naturally affected their organization and much of their policy. The northern two, Michigan and Wisconsin, belonged to a later generation; an interval of nearly twenty years elapsing between the admission of Illinois (the last of the southern tier) and Michigan (the first of the northern). Consequently while Michigan and Wisconsin would naturally be dominated by similar sentiments and have similar constitutions and fundamental laws, they with equal naturalness reflect in those institutions the sentiments of a later day than those represented in the institutions of Ohio, Indiana, and Illinois.

Further, the tendency of the streams of migration in this country to follow in a general way the parallels of latitude, had its influence. In Indiana and Illinois the majority of the early settlers who gave shape to the institutions of those States were of the same classes and conditions and possessed of similar ideas with the founders and early settlers of Ohio. There was no sentiment even among the foremost men of those States favorable to or even appreciative of the idea of State universities as a part of the public educational system of an American State. With difficulty were these States at first induced to provide for the maintenance of common schools, and when private corporations were ready and anxious to organize and maintain colleges the desirability or the usefulness of a State university was not perceived. Accordingly in Indiana the territorial legislature in 1806 bestowed the Congressional grant upon a private college at Vincennes, and appear not even to have discussed the establishment of a territorial university. In 1816, when Indiana became a State, another township of land was given by Congress, and a seminary was organized which in 1828 became the College of Indiana, but organized much as the two Ohio institutions had been. Though the subsequent developments of this institution since about 1850 has shown that the true higher educational idea has been grasped and applied, its early career was marked by no events of peculiar and special influence upon the development of the higher education in the North-West.

In Illinois, though the State received a land grant in 1818 for the endowment of a college, the proceeds of the grant were borrowed and used by the State for other purposes until 1857, when they were bestowed upon a normal college or university. At the same time, both in Indiana and Illinois, the freest scope was given by public sentiment and by law for the incorporation and establishment of private colleges, and in Illinois, especially, many were founded under the support of the various denominations, and upon the New England model.

Turning, now, to Michigan, the first settled and admitted of the northern tier in the territory (if two may be considered a tier), a different set of forces is found to have shaped the higher educational policy, and, as a consequence, a somewhat different educational status exists at the present time. In that State was brought to maturity, in its practical application, a theory of the State's relation to the education of its citizens that has exercised a greater influence upon other States than is attributable to even that grand idea of a university for which Thomas Jefferson strove so hard and with such ultimate success, and whose history has been recently told in the scholarly monograph of Dr. H. B. Adams.¹

It is true that general educational ideas had advanced much in the thirty years just preceding Michigan's organization as a State, and that she could take advantage of that progress, but, independently of other American States, she worked out and put in operation something different in an educational way than had existed before.

In 1817, when there were not over 7,000 people in the territory, the first steps were taken to organize the higher educational policy of the territory. In that year, as the result of a conference between Rev. John Monteith, a young Princeton graduate living in Detroit, and Hon. A. B. Woodward, one of the judges of the territorial court, an act was adopted by the Governor and judges of the Territory establishing the Cathole-pisterniad, or University of Michigan. This act, as redolent throughout as in its title with the pedantry of its author, was drawn by Judge Woodward, and the advanced ideas lying underneath its polyglot covering were in the main inserted by the learned judge; whence he derived them is not altogether determined, but probably many of them, like the unfamiliar Latin and Greek titles of professorships in the act, were original with Judge Woodward, while some were undoubtedly borrowed from France.

By this act the nature of the university was prescribed, and in addition to the university functions proper, the institution was given the right "to establish colleges, academies, schools, libraries, laboratories and other useful literary and scientific institutions throughout the various counties, cities, towns, and other divisions" of Michigan. For its benefit the taxes were increased 15 per cent. In essence, this act subordinated all public education in the territory to the control of the university and made the latter the head of the educational body. It is doubtful if in the whole educational history of the United States more suggestive ideas can be found in any single enactment than in this brief law covering less than two pages of the ordinary statute book. In it lay complete the idea of the duty of the State to undertake the whole educational work from lowest to highest. Under its provisions two professors were appointed, the one a Protestant clergyman, Rev. John Monteith, the other, Gabriel Richard, the Catholic bishop of Michigan. The appointment of two such men is still further evidence of a new departure in educational matters. They proceeded at once to establish primary schools in the three principal settlements in the territory and a college or rather an academy in Detroit. No higher educational work was at that time possible nor attempted, but the all-important idea was planted that a university, even though for a time it exist in name only, was a part of the public educational system and should have direct relation with the primary and secondary education.²

In 1821 the act was superseded by one clothed in nineteenth century English, modifying and recasting the university. The important feature was retained that the trustees in addition to establishing a university "might from time to time establish such colleges, academies, and schools dependent upon the university as they might think proper." The college township granted by Congress was to be placed in the care of the trustees and the schools established under the first organization were turned over to the new one. From 1821 till Michigan became a State this corporation, though it did not establish a college, maintained the academy and schools and kept prominent the idea that a State university was to be established as the cap to the educational pyramid of the State.

When the State constitution was framed in 1835 provision was made for the creation of the office of State superintendent of public instruction. The evidence is clear that this provision was in imitation of the Prussian system; a stray copy of Cousin's famous

¹ Thomas Jefferson and the University of Virginia. By H. B. Adams, Ph. D. (U. S. Bureau of Education, Circular of Information, No. 1, 1888), Washington, 1888.

² For an excellent account of this educational beginning in Michigan see an article on territorial schools in Michigan by Prof. Lucy M. Salmon, in *Education*, volume for 1885. A good account is also given in Ten Brook's History of State Universities and the University of Michigan.

"Report" having a short time before fallen into the hands of the member of the constitutional convention who introduced and advocated the clause creating the office. Rev. John D. Pierce, a native of New Hampshire, a graduate of Brown University, and a resident of Michigan since 1831, was immediately appointed to the office, and among his first duties was that of reporting a plan for the organization of the common school system and a university and its branches. Mr. Pierce was familiar with the history of the territorial university organization and he too had studied Cousin's "Report." As a result, in 1837 he presented a report to the Legislature containing elaborate arguments in favor of the establishment of a university upon a broad basis. He advocated one central university and the establishment of branches in each county and an intimate relation between the university and the educational department of the State. In substance, the Legislature adopted his plans, and the university which for twenty years had existed mainly on paper soon began its actual educational career. While considerable modification has been made in its organization the State has never once wavered from the position that the university was rightly the crown of the public educational system of Michigan. Though the original idea of giving the university control over secondary education was abandoned in 1837, it was in 1870 virtually re-established, when the university announced that thereafter it would admit without examination to its Freshman classes graduates from such public high schools in the State as would adjust their courses to fit the university requirements for admission. As a result the high schools of the State have as a rule met the standard set by the university and respond as quickly to a modification of the university's entrance requirements as if the university government had direct authority to authorize a change in the high school courses.

It has seemed fitting to enter into such details in order to show that the idea of a great State university, controlled and managed by public officials, endowed by the National Government and assisted by State taxation, was a growth in Michigan from causes not common to the three older States, and that by the time Michigan was ready to open her university for students, the theory of State control, and so far as necessary State support, of a university, was accepted as a natural function by her people.

At the same time the general collegiate experience of Michigan has been noteworthy. Comparatively few sectarian colleges have been founded, and their character and scope have placed them in a good rank as compared with similar institutions in the West. It is believed that this has not been the mere result of chance or accident. Superintendent Pierce, at the beginning of the State's career, in his report for 1838, raised the question whether any charters for private colleges should be granted by the State, and himself took a radical position against the issuance of such charters. In discussing the subject he expresses himself forcibly, and as many then thought and will now think intemperately, saying that by the decision of this question by the Legislature it would be determined "whether the State shall eventually assume the first rank in the republic of letters by founding and rearing up an institution of noble stature and just proportions, worthy alike of the State and of learning, and equally worthy the name of university, or whether the State shall ultimately sink to a low level in the world of knowledge, having institutions under the imposing name of colleges scattered throughout the length and breadth of the [land] State, without funds, without cabinets, without apparatus, without libraries, without talents, without character, and without the ability of ever maintaining them. If one is granted others must be, and there is no limit. If one village obtains a charter for a college all others must have the same favor. In proportion as they increase in number, just in that proportion will be their decrease of power to be useful."

The Legislature, in a long and able report of one of its committees, took issue with the superintendent, and refused to adopt his views. Provision was soon made by which colleges might be organized and chartered. The general law of the State for nearly forty years has provided in substance that while any five men may receive a charter as a college corporation, they must first show that stock or legacies to the amount of \$30,000 have been provided, and that fifty per cent. has actually been paid in. The college is then given usual collegiate powers with the right to confer the customary degrees, "provided that the course of study shall be in all respects as thorough and comprehensive as is usually pursued in similar institutions in the United States." The college must make annual reports to the superintendent of public instruction on certain specified matters that will give him a knowledge of their condition and work. Further, the superintendent annually appoints a board of visitors for each of these private colleges, and this board must submit to him an official report of their examination, which report is published by the State.

From the foregoing it is to be noted that while the establishment of colleges has been provided for and in no way discouraged, all such institutions have been made in a reasonable degree subject to State regulations and to public and official visitation. That these provisions have had a wholesome influence upon the character, scope, and development of the colleges in Michigan can hardly be questioned.

Wisconsin modelled her university and her entire educational system upon that of Michi-

gan, and if the development of her State university has not been so marked as in the case of Michigan, it is mainly due to the fact that it is younger. Indiana has for some years been working along the same line of development, and Ohio and Illinois have so far modified their earlier policy as to take advantage of the land grant of 1862 for agricultural colleges, and by a somewhat broad interpretation of the provisions of the grant have founded each a university upon a broad and liberal basis.

To conclude in a few words, the history of the higher educational movement in the North-West shows the foundation, especially in the older States, of many private colleges, each of which in its own field is doing higher educational work. Along with the establishment of these colleges has come the development and spread of the State university idea, not as antagonistic to the private colleges, but as co-operative with or supplementary to them, and as rounding out the public school system, which obtains in all the States in the territory. The value of a strong central university, with numerous departments, ample libraries, laboratories, and scientific apparatus, and facilities for post graduate and professional study has been steadily gaining appreciation, not only for the immediate educational opportunities afforded, but for its regulative influence upon the character and scope of the secondary education, and its indirect influence upon the life and culture of the people under a democratic form of government, where public safety demands the education of its citizens.

TRIBAL AND FAMILY RELATIONS AMONG THE INDIANS OF METLAKAHTLA.

In the Report of this Office for 1886-87 a brief account was given of a trip made by the Commissioner to Alaska and of the tour of inspection made in July, 1887, in obedience to the direction of the Secretary of the Interior, to see that the orders of June 15 in relation to the schools in that Territory were being complied with.

Upon that visit it was the good fortune of the Commissioner to meet with the English missionary, William Duncan, and to be present on the occasion when the Indians with whom his life has been spent, having removed from the British possessions to American soil, made a formal opening under the American flag of the settlement, named Metlakahltla, after their former home. The following letter from Mr. Duncan, recently received in response to enquiries respecting the meaning of certain carvings upon silver spoons made by a native Metlakahltan silversmith, contains matters of such general interest in relation to the tribal and family customs and relationships of these Indians, who have now become dwellers on American soil and whose children are to be taught in American schools, that it has been deemed advisable to insert it here:

ON BOARD THE "GEO. W. ELDER,"

July 15, 1889.

Hon. N. H. R. DAWSON, Washington, D. C.:

DEAR SIR: I am glad to learn from your letter of the 28th March that the silver spoons made by our native artist are appreciated.

In answer to your enquiries respecting the maker and his craft, I beg to inform you that he belongs to the Tsim-she-an nation, and his name was Tsa-h-am-sheg-ish, or the Power-that-draws-shoreward. On becoming a Christian some years ago he was named Abel Faber.

In making the tea-spoons Abel tells me he beats each one out of a silver dollar, but for dessert-spoons, which require a dollar and a half, he has to melt the silver in a crucible. After hammering the piece of silver to the required length and thickness he then forms the bowl of the spoon by beating the plate into a wooden mould of the size and shape he wishes the spoon to be. This done, he files and sand-papers his work (in olden times the dried skin of the dog-fish answered for sand-paper), after which he uses a smoothing-stone, and finally polishes with a handful of soft fibre—the dried and teased inner rind of cedar bark. His last operation is to carve the handle.

The designs he cut on the spoons sent you are peculiar to the carving and painting of the Indians all over the country, and are symbolical of the various crests, or totems as they are sometimes called, which seem to have been adopted in remote ages to distinguish the four social clans into which each band is subdivided.

The names of these four clans in the Tsim-she-an language are Kish-poot-wadda, Canada, Lache-boo, and Lachsh-keak. The *Kish-poot-wadda*, which are by far the most numerous clan hereabouts, are represented symbolically by the fin-back whale (in the sea),*the grizzly bear (on land), the grouse (in the air), and the sun and stars (in the heavens).

The *Canada* symbols are the frog, the raven, the star-fish, and the bull-head.

The *Lache-boo* take the wolf, the heron, and the grizzly bear for their totems; and the *Lachsh-keak* the eagle, the beaver, and the halibut. The creatures I have just named are, however, only regarded as the visible representatives of the powerful and mystical beings or genii of Indian mythology; and as all of one group are said to be of the same kindred so all the members of the same clan whose heraldic symbols are the same are counted as blood relations. Strange to say this relationship holds good should the persons belong to different or even hostile tribes, speak a totally different language, or be located thousands of miles apart.

On being asked to explain how this relationship originated, or why it is perpetuated in the face of so many obliterating circumstances, the natives point back to a remote age when their ancestors lived in a beautiful land, and where, in a mysterious manner, the mythical creatures whose symbols they retain revealed themselves to the heads of the families of that day. Then they relate the traditional story of an overwhelming flood which came and submerged the good land and spread death and destruction all around. Those of the ancients who escaped in canoes were drifted about and scattered in every direction on the face of the waters, and where they found themselves after the flood had subsided there they located and formed new tribal associations. Thus it was that persons related by blood became widely severed from each other, nevertheless they retained and clung to the symbols which had distinguished them and their respective families before the flood, and all succeeding generations have in this particular sacredly followed suit. Hence it is the crests continue to mark the offspring of the original founders of each family.

As it may interest you to know to what practical uses the natives apply their crests, I will enumerate those which have come under my own notice.

1st. As I have previously mentioned, crests subdivide tribes into social clans, and a union of crests is a closer bond than a tribal union.

2d. It is the ambition of all leading members of each clan in the several tribes to represent by carving or painting their heraldic symbols on all their belongings, not even omitting their ordinary household utensils, as spoons and dishes, etc.; and on the death of the head of a family a totem pole is erected in the front of his house by his successor on which is carved more or less elaborately the symbolic creatures of his clan as they appear in one of their mythological tales or legends.

3d. The crests define the boundaries of consanguinity, and persons of the same crests are forbidden to intermarry; that is, a frog may not marry a frog, nor a whale marry a whale, but a frog may marry a wolf, and a whale may marry an eagle.

Among some of the Alaskan tribes I am told the marriage restrictions are still further narrowed, and persons of different crests may not intermarry if the creatures of their respective clans have the same instincts; thus a Canadna may not marry a *Lachsh-keak*, because the raven of the one crest and the eagle of the other seek and devour the same kind of food. Again, the *Kish-poot-wadda* may not marry a *Lache-boo*, because the grizzly bear and the wolf representing these crests are both carnivorous.

4th. All the children take the mother's crest, and are incorporated as members of the mother's family, nor do they designate or regard their father's family as their relations.

A man's heir and successor, therefore, is not his own son, but his sister's son. And in the case of a woman being married into a distant tribe away from her relations her children when grown up will leave her and their father and go to the mother's tribe and take their respective positions in the mother's family.

This case accounts for the great interest which natives take in their nephews and neices, and which seems to be quite equal to the interest they take in their own children.

5th. The clan relationship also regulates all feasting. A native never invites the members of his own crest to a feast. They being regarded as his relations are always welcome as his guests, but at feasts, which are given only for display, so far from being partakers of the bounty all the clansmen within a reasonable distance are expected to contribute of their means and render their services gratuitously to make the feast a grand success. In the fame of the feast hangs the honor of the clan.

6th. What I have just written reminds me to add that this social brotherhood has a great deal to do with promoting hospitality among the Indians, a matter of immense importance in a country where there are no hotels or restaurants.

All a stranger with or without his family in visiting an Indian village has to do to find shelter and protection is to make for the house belonging to one of his crest, and which he can easily distinguish by the totem-pole in front of it. There he is sure of a welcome and of the best the host can afford, and there he is accosted as a brother and treated and trusted as such.

7th. I may mention, too, that the subdivision of the band into these social clans accounts in a measure for the number of petty chiefs existing in each tribe, as each clan can boast of its head, and the more property a clan can accumulate and give away to rival clans the greater number of head men it may have.

8th. Another prominent use made by the natives of their heraldic symbols is that they

can take names from them for their children. For instance, the name *Weenayach* means big fin back (whale); *Leetamlachtoro*, sitting on the ice (eagle); *Ikshksumatjal*, the first speaker (raven); *Ahil-ka-kout*, the howler abroad (wolf).

9th. And last but not least, the kinship claimed and maintained in each tribe through these crests has much to do in preventing bloodshed, and also in restoring peace where quarreling and fighting have arisen. Tribes and sections of tribes may and do fight, but members of the same crest may not fight; hence in hostilities arising between two or more tribes there are always some families who are non-combatant, and these will watch for the opportunity to interpose their good offices in the interests of peace.

In writing of these matters it must be understood I have kept in view the natives in their primitive state. The Metlakahtlans, who are civilized, while retaining their crest distinctions and upholding the good and salutary regulations and customs connected therewith, have dropped all the baneful and heathenish rivalry with which their clannish system was intimately associated.

Though I cannot say that the foregoing by any means exhausts all that can be said or written on this subject, yet I trust that what I have written will in some degree answer the enquiries you made of me.

I have the honor to be, dear sir, yours, very obediently,

W. DUNCAN.

CHAPTER XXI.

STATE TEACHERS' READING CIRCLES.¹

CONTENTS—*Necessity of discriminating between Books—Negative action in the Council of Education as to the better professional books—The course of the reading circle not confined to professional topics—Lack of enthusiasm in California—Improvements effected in Illinois—Form of certificate and diploma used there—Two-book system also adopted in Indiana—"Outlines" prepared for the works of the Indiana course—The Young People's Reading Circle of Indiana—Backward condition of the Iowa Circle—Reorganization of the Kansas Circle—The recently founded Maryland Circle, and "outline" of one of the works adopted—The recently organized Mississippi Circle—College graduates and poor teachers have no use for the reading circle—Necessity of State recognition—Business forms used in Ohio—The course in Rhode Island, and the reasons for adopting each of the works of which it consists—No State organization in West Virginia—Elections and overwork preventing good results in Wisconsin.*

One of the most desirable associations for the teacher to form, said a schoolmaster at a recent teachers' meeting, is the association of the teacher with one good book and then with another good book; the object of the reading circle is to promote this association and to conduct it in an intelligent way. When the unsuccessful warfare, maintained by the Latin civilization against Teutonic and other invading barbarians, had culled for posterity the more important works of antiquity from the vast literature of the Roman empire, vast notwithstanding the slave or serf did the work of the printing press, science might well be contained in Aristotle and "methods" of education in Quintilian, and there was little demand for a "best hundred books." But literature has again assumed immense proportions, and the question *what to read* is as important as *how to read*, and together they form a very important question indeed.

A report on "Books on Pedagogy" was presented by the committee on educational literature of the National Council of Education, at its last meeting. The subject, however, is treated in a negative rather than a positive manner, and the difficulties of making a selection signalled rather than solved. The remark of the late president of the normal school section of the National Association is more hopeful, when he inquires if it is not desirable that teachers, inasmuch as they follow some kind of authority, should know a little more definitely what the more intelligent and more experienced part of the profession recognize as wisest and best.²

Professional reading, however, is not the only intellectual diet of these circles. The domain of belles lettres is also entered. Yet it is apparent that whatever may be the character of the reading course pursued, the unique object is to improve the teacher as a teacher. To this must be added the influence, powerful, though indirect, in stimulating the formation of public libraries; as is instanced by recent action in a western State.

The inception and administration of these circles is referred to in a general way in the preceding Report of this Bureau. Desirous of obtaining the latest possible information as to the status of these societies, special inquiries have been made in the matter, of each State superintendent of public instruction, or equivalent official. The responses to these inquiries have been used in compiling the following information.

ALABAMA.

"I do not think much is being done," says Superintendent Palmer. The gentlemen to whom he kindly referred us have as yet failed to respond.

CALIFORNIA.

Not more encouraging, but fuller, our information for this State covers the whole of 1888.

Purpose.—"An aid and stimulus to the teachers of California in their efforts for professional improvement and self-culture. The latter must necessarily lead to the former, while the former will continually call for a widening of the mental horizon. It is be-

¹This chapter would have followed the chapter upon the Training of Teachers, had its preparation not been delayed by unavoidable circumstances.

²See training of teachers, p. 395.

lieved that an organization like the one proposed will give that strength which comes from unity of purpose and effort, and make the reading circle an intellectual power in the State."

Course.—The plan of study contemplates a three years' course. For 1887, the initial year, the course was in the following works.

Ben Hur; Payne's Lectures on Education; Trench on the Study of Words, Supplee's edition; Lady of the Lake, Lovell edition, with full notes, paper; Ruskin, Sesame and Lilies.

For 1888 two courses were offered, respectively styled, regular and supplementary. The reading of the regular course is grouped as—

Biography—Plutarch's Pericles, Fabius Maximus, Demosthenes and Cicero, Cæsar and Alexander. Literature—Odyssey, Butcher and Lang's translation. Professional—Hopkins's Outline Study of Man. Literary and Historical—Burke's Speeches on America.

The supplementary course comprised Studies in Longfellow; Pryde's Highways of Literature; Parker's Talks on Teaching; Fiske's redaction of Irving's Washington.

Administration.—The general management of the circle is vested in the State board of councillors, which consists of seven members including the State superintendent of public instruction, who is an *ex-officio* member. The officers are a president and a secretary and treasurer. The terms of two of the members expire each year and are filled at the annual meeting held in December.

County superintendents are urged to form county circles. These are to be directed by a board of four directors chosen by the members of the local circle from among themselves with the county superintendent, as a member *ex-officio*. This board, it appears, is subject to confirmation by the board of State councillors. The local board elects its own officers, collects dues, etc.

The annual fee charged is 50 cents; of this 35 cents are forwarded to the secretary of the State circle to defray printing expenses, the remaining part of the annual fee being retained "by the local secretary." Individual members, that is those belonging to the State but not to a county circle, remit the whole amount to the secretary of the State circle.

The State board sends blanks to the local organizations quarterly; upon these the county officers enter the amount of work done and its quality as ascertained by examinations. To those who have completed in a satisfactory manner the annual course of reading the State board issues a certificate and three of these certificates entitle the holder to a diploma of honor. The reading books are furnished by the State secretary, postpaid, on receipt of price.

During the first year of its existence (1887) the membership of the circle was 473, twenty-two counties being represented; in 1888 but fifteen counties are represented and the membership but 322. The blanks sent out early in 1888, requesting information as to the work done in 1887 were, with three exceptions, ignored. The status of the work is well put by the general secretary, Mrs. Fisher, and we quote from a recent letter from her:

"This fact [the general inattention to the request for information], added to the decrease of membership, does not afford a flattering outlook. The successful maintenance of such an organization demands a great amount of earnest, united, judicious, persevering work, not from two or three or half a dozen individuals, but from *many*. This has not been secured in the past. Personally, I am not sanguine as to its attainment in the future. I hope I am mistaken in my views."

COLORADO.

Says the State superintendent: "We have no reading circle for teachers in this State."

CONNECTICUT.

We understand that the public school systems of Bridgeport and Norwich are connected with a branch of the Chautauqua Reading Circle, intended especially for teachers.

DELAWARE.

"There are no teachers' reading-circles in Delaware, so far as I can learn," says the president of the board of education.

FLORIDA.

"We have not organized a State circle as yet," says the State superintendent. "We are just beginning to move in that direction. Our teachers have for some time been associated in Chautauqua circles, which seem to have so delighted them that they are loth to engage in others; but I have reason to believe that in a short time teachers' reading circles will be universal in our State."

GEORGIA.

"As far as teachers' reading circles are concerned, we are unable to give you definite information. The movement in question has not taken general hold of the teachers in this State." This, by the courtesy of Mr. Edgar Orr, of the State department of education.

ILLINOIS.

The Bureau is indebted to Superintendent Gastman, of Decatur, for the very full statement of the affairs of the Illinois Circle, over which he presides.

Purpose.—The reading circle seeks to interest teachers in a carefully prepared course of reading, to the end that they be better prepared to do the important work of the school-room. This must be largely an individual work. It appeals directly to the teachers of the district schools because they can do the work alone just as well as the teachers of the graded schools. A circle of two, five, or ten earnest readers will undoubtedly prove an inspiration and a help, but no teacher who really desires to improve need wait for this.

Any teacher or other person in the State of Illinois may become a member of this circle by forwarding his name to the board of managers of his county together with a pledge to faithfully pursue the prescribed course of study, and paying a fee of 25 cents for this year, and for future years such fees as may be decided upon at the beginning of the year. The form of application for membership is this:

[Blank No.1.]

ILLINOIS TEACHERS' READING CIRCLE.

I wish to be enrolled as a member of the Illinois Teachers' Reading Circle for the year beginning September 1, 1888.

I respectfully request our county superintendent to order the necessary books for me.

_____, 1888.

P. O.

Course.—It has been thought best by the management of the circle that the work be arranged in two courses, the first to be known as the elementary course, and to cover two years of study, and the second to be known as the advanced course, and to cover three years. Since the organization of the circle the following courses have been pursued:

FIRST YEAR—1885-6.

REQUIRED.

TEXT BOOKS.

1. PEDAGOGY.....Hewett.
2. SCHOOL LAW.....Illinois School Law.
3. PHYSIOLOGY.....Any Standard School Text Book.
4. HISTORY.....Barnes's General History, to page 313.

RECOMMENDED READING.

Nordhoff's Politics for Young Americans.

Gow's Morals and Manners.

SECOND YEAR—1886-7.

REQUIRED.

TEXT BOOKS.

1. PEDAGOGY.....Joseph Payne's Lectures.
2. HISTORY.....Barnes's General History, from page 313 through.
3. LITERATURE.....Julius Caesar, Lady of the Lake, and Evangeline.

RECOMMENDED READING.

Parker's Talks on Teaching.

Swett's Methods of Teaching.

THIRD YEAR—1887-8.

White's Pedagogy.

Barnes's General History.

FOURTH YEAR—1888-9.

History of Pedagogy.—Compayré.

Washington and His Country.—Irving.

At a meeting of the directors, held in Chicago at the time of the National Educational Association, July, 1887, the manager, E. A. Gastman, reported that, in his opinion, it would be wise to abolish the board of county managers and to place the interests of the circle in each county in the hands of the superintendent and teachers; also, that it would be well to discontinue the elementary and advanced courses heretofore outlined, and to arrange, each year, a two-book course for the circle. The directors adopted both recommendations and ordered that White's *Pedagogy* and Barnes's *General History* be used the coming year.

The following circular was issued August 1, 1887:

"To the Teachers of Illinois:

"The experience of the past two years seems to indicate that it will be well to simplify the organization and course of study of the Illinois Teachers' Reading Circle. The organization in each county will be left to the superintendent and teachers to arrange and carry forward. The membership fee will remain 25 cents, as heretofore.

"The board of directors has concluded to prepare a course of reading for each year, and respectfully announce the following for the year beginning September 1, 1887: White's *Pedagogy*; Barnes's *General History*.

"Mr. Geo. P. Brown, of the Illinois School Journal, has kindly consented to prepare and publish outlines of these readings in the Journal, and also in the form of slips, which will be furnished to all readers who may apply to him or to the undersigned. In these outlines an attempt will be made not only to indicate the important topics of the designated books, but to call attention to other books bearing upon these questions, thus making the outlines a guide to the literature of the subjects treated."

The directors earnestly advise all readers to begin with the course of 1888-89. It is no slight advantage to the reader to feel that he is associated with a large body of earnest workers in the same cause. But in response to a number of requests it has been determined to allow readers to select the work of such years as may seem best adapted to their wants. In making selections the reader is requested to note carefully the following:

1. A membership fee of 25 cents will be required for each year except the present.
2. No outlines can be furnished for past years.
3. When asking for the examination questions he must state explicitly which year's work he has completed.

The results of this change will be given hereafter.

In the first annual examination, that of 1886, members were examined on four topics, being asked in all about fifty questions, nearly equally divided among the three subjects of pedagogy, general history (that of Greece and Rome), and school law, but one question being asked on physiology. The members were requested at this examination to answer briefly and were at liberty to consult such works as each might desire. The examination paper for the second year, the second of the elementary course, has about the same number of questions as the paper of the preceding year, also equally distributed among three topics, but not the same three; for poetry has taken the place of school law, and physiology has disappeared. The paper for 1888 is given in full. It bears the title "Illinois Teachers' Reading Circle, Third Annual Report of Readings," and the injunction, "Members will please answer all questions briefly and in their own language."

The questions were—

ON PEDAGOGY.

Have you read carefully all of White's *Pedagogy*, as prescribed? What is the difference between the ideal function of the public school, abstractly considered, and the ideal function of any specific school you may be called upon to teach? Give in your own language your conception of what knowledge, power, and skill are. What are the three faculties of the intellect? Describe the different kinds of knowledge given by each. Define *attention* and *retention* in your own language. Distinguish between *reproductive* and the *constructive* imagination. Distinguish between the process of generalizing and that of classifying. Distinguish between a judgment and a syllogism. Describe the process of forming a general notion, or concept. Distinguish between elementary and scientific knowledge in your own language. What is the truth in the maxim, "Never present the word until the idea has been taught?" What is true in the maxim, "Learn to do by doing?" Why is oral teaching so much easier for a child to understand than *written* teaching? Is it, therefore, better? How many general methods are there of imparting instruction? Name the chief ways of pursuing any one or all of these methods.

GENERAL HISTORY.

Have you carefully read all of Barnes's *General History* and the outlines as required? What books suggested as collateral reading in the outlines have you read? State the

commanding principle of the Chinese, the Indians, the Persians. What was the dominant idea that controlled in the development of the civilization of Egypt? Show how this appeared in their art. Show that the geography of Greece was favorable to a more advanced civilization than had before existed. What were the three great periods of conflict of Greece, or the West, with Asia, or the East? State result in each case. What decisive battles of the world were fought on Grecian soil? Why decisive battles? Name the greatest artists, poets, philosophers, and statesmen of the age of Pericles. Give date of this age. What education was provided for children by the Greeks? How did the Spartan civilization differ from the Athenian? How did Grecian art differ from Egyptian? What would you state as the governing principle or principles of the Greeks? What made Rome a greater nation, in a political sense, than Greece? What was the "Magna Charta" of the Roman people, and how secured? What would you state as the commanding idea of the Roman people? In what did the commanding idea of Christianity differ politically from that of the Romans? What event prevented the degeneration of Christianity in the world to the level of Christianity in the Byzantine Empire? Name the greatest statesmen, poets, historians, and warriors of the Roman people. What was the cause and results of the Crusades? What was the Feudal system? It was a reaction against what, and to what did it lead?

GENERAL.

What other books have you read during the year? What magazines? What educational journals? Have you paid the membership fee for the year? Your name in full. Post-office. County. Illinois.

"The Circle," says the management in a recent address to the members, "is in excellent condition at this date. In many counties a large number of the teachers have been enrolled for this year. Requests for circulars and examination papers are received daily at the central office. Copies of the questions prepared upon the reading of either of the past three years *can still be furnished*. You will receive credit for work done *when ever* you send in your answers. The questions on the readings of the present year (1888-9) will be ready by April 1, 1889.

"The diplomas are ready for those who have completed the work of any *two* years. The general manager is sending out the seals to those who have finished the work of three years.

"The same arrangement regarding certificates and diplomas will be continued; that is, a certificate will be given on the completion of the work of the first year and a diploma when the readings of two years have been finished. For each year's reading, in addition to these, a seal will be furnished, which can be attached to the diploma given at the end of the second year."

The certificate, seal, and diploma are in the following words:

(Certificate.)

ILLINOIS TEACHERS' READING CIRCLE,
Decatur, Ill., —, 188-.

This will certify that ——— has passed a satisfactory examination in the readings of the first year of the elementary course.

E. A. GASTMAN,
Manager.

(Seal:) Illinois Teachers' Reading Circle. Three years. 1888.

(Diploma.)

ILLINOIS TEACHERS' READING CIRCLE DIPLOMA.

This is to certify that ——— has completed the elementary course of readings prescribed by the board of directors of the Illinois Teachers' Reading Circle, and having passed the required examinations is entitled to this diploma.

Witness our signatures:

Given at Decatur, in the county of Macon, State of Illinois, this — day of —, A. D. 188-.

[STATE SEAL.]

E. A. GASTMAN,
Manager.

GEORGE I. TALBOT,
President Board of Directors.
JAMES C. BURNS,
Secretary Board of Directors.

Administration.—The officers for the State at large are a general manager and a board of directors of six. The board holds meetings at such times as the occasion demands, sends examination questions to county managers, and issues a certificate when any year's work has been completed by an examination, and a diploma when the work of a

course has been completed in like manner. In order to save expense the manager of the central office issues all necessary blanks for the use of secretaries of boards of county managers and local circles.

In the counties there was until 1887 a board of county managers, of which the county superintendent acted as president. The four other members were appointed by the State board of directors. If the county superintendent declined the directors appointed a president. The board elected a secretary. The president presided at the meetings of managers.

The duties of the secretary of the county were as follows: 1. To keep a list of members; file pledges of members; report names of new members quarterly to central office. 2. To keep an accurate account of all moneys received and paid out. 3. Give notice of meetings of the managers and of annual examinations. 4. To make, in connection with the president, arrangements for holding annual examination, grading of papers, and forwarding them to central office. The board retained ten cents of each membership fee for their expenses.

Local circles were organized and had a secretary, whose duties were as follows: 1. To report promptly to secretary of county managers the name of the circle, the names of members, and to remit the membership fees. 2. To distribute all circulars, notices, etc., to members. 3. To give notice of extra meetings, and generally to do whatever may promote the efficiency of the circle. The directors suggested that in their judgment meetings should be held at least once every two weeks, and that these meetings should be made as helpful as possible to the members. Local management, however, is now differently conducted, as appears in the following.

"The board of directors," says the address to the teachers of Illinois, "has determined to divide the State into districts, and each director will assist the general manager in organizing and carrying on the work in his own section."

For the year beginning September, 1888, no membership fee was charged. The receipts from all sources principally, we believe, as membership fees were for 1885 and 1886, \$555.73; the financial concerns for these two years are as follows:

E. A. Gastman, treasurer, to Illinois Teachers' Reading Circle.

Dr.		Cr.	
Dec. 30, 1884, to P. R. Walker, treasurer Illinois Teachers' Association.....	\$100 00	By printing, for two years.....	\$174 05
Dec. 27, 1886, to receipts from all sources from Jan. 1, 1885, to Dec. 27, 1887.....	585 73	By clerk hire of manager.....	32 15
		By stationery.....	45 65
		By expense of directors' meetings.....	36 75
		By returned to G. D. Thompson, Gol- conda.....	2 10
		By postage, telegrams, and expressage..	93 38
		By salary of manager.....	157 60
Total.....	685 73		
		Total	541 68
		By balance on hand.....	144 05

Such is the frame work of the Illinois Circle, and it only remains to inquire if it is animated by the vitalizing principle that Mrs. Fisher laments the absence of in California. From what has already been said on the late reorganization it may be inferred that the condition of the work was not all that was desirable but from what follows it will be seen that the change has been productive of much good. We quote from Manager Gastman's letter to us as to the results as follows:

"The results of this action were very gratifying. At the meeting of the Teachers' Association in December, 1887, the manager was able to report the circle in a flourishing condition, and he attributed this to the aid of the directors in their several districts, to George P. Brown, for preparation and publication of the monthly outlines in the Illinois School Journal, and, lastly, to the shortening of the course so as to require the reading of but two books.

"At the meeting of the Illinois Teachers' Association held in Springfield, December 26-3, 1888, the manager, E. A. Gastman, Decatur, reported that for the year ending September 1, 1889, over two thousand teachers would read the course prescribed, and he estimated that five thousand persons were now doing some part of the work; and stated that the circle was not only out of debt, but had a balance of \$116 on hand.

"By an almost unanimous vote, the association requested the directors to organize a pupils' reading circle. The directors selected the following books for the teachers' circle for the year 1889-90:

"Theory and Practice of Teaching, Page.

"Lectures on Pedagogy, Compayré.

"Lights of Two Centuries, E. E. Hale.

"Teachers were recommended to read the Week's Current, published by E. O. Vaile, Oak Park, Ill.

"It will be noticed that two books are offered in the above course. This was done for the purpose of adapting the work to the wants of the teachers. Those who have read the courses for the past three or four years are *advised* to read Compayró's Lectures on Pedagogy, but this is not required. All others will read Page.

"A pupils' reading circle, of two grades, was arranged, and the following books were adopted:

Intermediate grade, or fourth and fifth readers:

	<i>Cost to pupil.</i>
Sea-side and Way-side.....	45 cents.
Stories of Our Country.....	45 cents.
Advanced grade, or above fifth reader:	
Health Lessons.....	55 cents.
Animal Memoirs.....	60 cents.
The Pathfinders.....	60 cents.

PRESENT OFFICERS.

Directors.—H. D. Fisk, Dwight; James C. Burns, Monmouth; J. A. Mercer, Peoria; John A. Miller, Bloomington; Miss S. May Campbell, Hennepin; George Harrington, Carlinville.

President.—H. D. Fisk.

Secretary.—James C. Burns.

Manager and treasurer.—E. A. Gastman.

INDIANA.

As in the instance of Illinois, so in this, the Bureau has been favored with a very comprehensive report, kindly furnished by the secretary, Mr. D.M. Geeting. Of the two State circles of Indiana, one for teachers and the other for pupils, that for adults claims attention first.

Purpose.—The circle owes its existence to the following resolution adopted at the annual meeting of the State Teachers' Association of 1883:

"Resolved, 1. That this association proceed at once to take the necessary steps to inaugurate an organization among the teachers of Indiana for reading and study, to be known as the 'Indiana Teachers' Reading Circle.'

"2. That the circle be under the care and direction of the Indiana State Teachers' Association.

"3. That this association proceed to choose a board of directors, to which shall be intrusted the selection of a course of professional and literary reading, the issuing of certificates of progress, and the granting of diplomas as evidence of its completion."

"This organization," says the circular, "has resulted in a membership exceeding seven thousand. Well directed, methodical reading can but result in permanent good. The reading circle work insures to every member who carefully and thoughtfully pursues the course a growth in his literary and professional ability. Originating in a generous and laudable desire to furnish suggestions and help to those lacking in opportunity and means, the growth and the success of the enterprise can but gratify the originators of the work."

Course.—For the first four years of the existence of the circle the course was, respectively, as follows:

First year.—Brooks' Mental Science, Barnes' General History, Parker's Talks on Teaching.

Second year.—Brooks' Mental Science, Smith's English Literature, Hewett's Pedagogy.

Third year.—Hailmann's Lectures on Education, Green's History of the English People, and Watts on the Mind.

Fourth year.—The Lights of Two Centuries and Sully's Teachers' Hand-Book of Psychology.

"At the suggestion of county superintendents, to whom the organization owes so much," says Mr. Geeting, "and to whose earnest co-operation is due its large membership, and in harmony with a widely prevailing sentiment among teachers, the course of the year 1887-88 was made to include but two books, while still maintaining the two lines of work originally laid out,—Sully's Hand-Book of Psychology and the Lights of Two Centuries. The popularity of these two books had much to do with increasing the membership. The first gave system and definiteness to professional studies, the latter breadth of knowledge and a large insight into the agencies of general culture."

The fourth annual examination was held in fifty-one counties June 16, 1888, with the following list of questions. Applicants could elect whether they would pass upon any one or more of the four years work. The paper for 1888 is here given.

QUESTIONS FOR EXAMINATION

OF

MEMBERS OF THE INDIANA TEACHERS' READING CIRCLE.

FOURTH YEAR'S WORK—JUNE 16, 1888.

RULES FOR THE EXAMINATION.—In view of the fact that these manuscripts are to be sent to the several members of the board for gradation it is necessary that these rules be followed:

1. Write upon one side of the paper *only*, using legal cap.
2. See that the answers to the questions in each branch are entirely separate from those of any other branch and securely fastened together.
3. Write *full* name and post-office address upon each set of answers.

THE LIGHTS OF TWO CENTURIES.

[Answer any seven.]

1. What is the scope of the work? Of what educational value is it to be considered?
2. Name the parts into which the work is divided.
3. Designate one of the leaders of each class and characterize him briefly.
4. What is the rank of Watteau? Why?
5. Give a short sketch of Turner. What connection has Ruskin with Turner?
6. Who is Boswell?
7. What is Wagner's idea as to the purpose of music?
8. Name two novelists. Two essayists. Describe the home of each.
9. Name five poets in order of your preference, and a work of each based upon your classification.
10. What effect has the development of art had upon civilization?
11. How is the poetry of Wordsworth different from that of the school of Pope?
12. Name five inventors and an invention of each.
13. Which invention do you consider of most value? Why?
14. What noted literary persons were associates of Reynolds? Why were Reynolds's paintings not durable?

SULLY'S HAND-BOOK OF PSYCHOLOGY, 1888.

[Any seven.]

1. Distinguish between the science and art of education.
2. In what respect may the science of education underlie the art?
3. Define these educational terms: *Training, information, instruction, education.*
4. How does the mind acquire *sense knowledge, thought knowledge?*
5. Define self-consciousness and self-activity as fundamental qualities of mind.
6. What is the educational value of memory? Give brief synopsis of "culture of memory."
7. Describe the subjective method of mind study; the objective method.
8. What is attention? What relation does it bear to intellectual operations?
9. State the order in which the mental faculties develop.
10. Name the higher sentiments and discuss their bearing upon the education of the individual.
11. How are concepts formed?
12. Give the author's suggestion as to the proper use of words and the effect upon the child's mental development.

The number taking the examination for 1888 was 178, and over 500 papers were submitted. The number examined and the papers submitted were distributed thus:

On the Course for—	Applicants.	Papers.
1884-5.....	83	264
1885-6.....	134	301
1886-7.....	123	344
1887-8.....	178	556

Of this number 36 took the entire course, and in accordance with the provisions of the organization have received their diplomas, signed by the officers of the board.

Familiarity with the organization forces the conclusion upon the management that it is becoming daily more and more a veritable school for hundreds of teachers who would otherwise, with difficulty or not at all, be induced to seek professional growth.

The course for the fifth year is as follows:

Compayré's History of Pedagogy, D. C. Heath & Co., Chicago, \$1.25.

Hawthorne's Marble Faun, Houghton, Mifflin & Co., Boston, \$0.75.

Carlyle's Heroes and Hero Worship, John B. Alden & Co., New York, \$0.07.

Postage is prepaid by publishers. Outlines, including analysis and helpful suggestions of the first and second books, will be furnished by the secretary to county superintendents, from whom members may obtain them.

The large number taking an examination in the course of previous years, and the fact that it was found advisable to reduce the number of books read, as was also deemed necessary in Illinois, call for some notice of the courses of the early period of the circle's existence. In the examination of 1888 the reader was questioned on the work of the first and second years, being asked, in general, about ten questions on Smith's English Literature, General History, Hewett's Pedagogy, Parker's Talks on Teaching, and on "mental science." From the ten questions given on each subject any seven, five in the case of Talks on Teaching, might be selected. The examination on the third year's work was on Hailmann's Lectures on Pedagogy, Green's History of the English People, and Watts on the Mind.

But for 1888-89 three books have again been selected, and it is observable that they are all works of pre-eminent merit, which, however true of the pedagogical course of preceding years, was not so in the other courses. In short, they give a *vitality* to the curriculum.

In connection with this work of reading, and as a guide to it, "Outlines" have been prepared for the Marble Faun and for M. Compayré's work on Pedagogy. In preparing the outline of Hawthorne's work the compiler observes: "Three purposes have been kept in view. Under 'contents' has been given a list of topics for each chapter to guide the reader in his study. The divisions under this head are somewhat arbitrary, but seem, in the main, the most natural that could be made. Under 'note' have been given such explanations as to persons, places, etc., as seemed necessary to an understanding of the text. Under 'remarks' it has been the aim not to present an interpretation, but to make such suggestions as would lead the student to 'read between the lines.'" It is advised that the reader should use the topics and notes in connection with his first reading of a chapter; then, after a perusal of the remarks, reread the chapter to discover the deeper meaning. Mr. Alford makes three grand divisions of the work: (1) Crime, the origin of sin; (2) how the guilty escape the consequences of sin; (3) effects of sin on those who are innocent.

The outline of one chapter is given as a specimen of this important feature of the reading.

"CHAPTER 1, VOL. 1.

"MIRIAM, HILDA, KENYON, DONATELLO.

"Contents.—A room in the Capitol and a view from a window—Resemblance between Donatello and the Faun of Praxiteles—A description of the Faun.

"Notes.—Capitol, a building designed by Michael Angelo, located on Capitoline Hill near the centre of Rome.—Dying Gladiator, a piece of statuary representing the pathos of one who received his death wound in the arena [now generally thought to be a Gaul who either has killed himself to prevent captivity, as was the custom of that nation, or has fallen at the hands of the enemy].—Antingus, a representation of a youth who was a great favorite of the Emperor Hadrian. It expresses great sadness.—The Amazon, a war-like woman, represented as trampling her enemies under her horse's feet.—Lycian Apollo, a statue of Apollo at Patora, in Lycia, where he is said to have passed the winter months.—Juno, sister and wife of Jupiter, and queen of all the gods.—Arch of Septimus Severus, an arch erected by authority of law to commemorate the triumph of this emperor over the Persians.—Forum, a vacant space at the foot of the Capitoline Hill, where Roman justice was administered.—Coliseum, an amphitheatre for public entertainments, in the centre of which the gladiatorial contests took place; now the most famous ruin of ancient Rome. * * * Praxiteles, a Grecian sculptor, who lived about 360 B. C.

"Remarks.—'Symbol of the human soul.' In this sentence is given, as perfectly as can be in one sentence, the thought of the entire book—freedom to choose the good amid the evil.

"The characteristics of the Faun as presented in this chapter should be studied in connection with those of Donatello as brought out in the next.

"Is it possible that the Faun might be educated through the medium of his emotions?" The possibility of training the intellect through the emotions is an important thought for the teacher."

The Outlines for the Study of Compayré's History of Pedagogy, by Prof. S. S. Parr, of De Pauw University, are contained in twenty octavo pages. They divide M. Compayré's work into eight groups of chapters, each group representing a month's reading. The ground covered by each group is opened up by "Help questions." The analysis proper is prefaced by an introduction in which the terms educational psychology, general method, special method, history of education, and the philosophy of education are defined and the place and purpose of a history of education discussed.

To the introduction are added some remarks on "the study of the book." Let the teacher ask himself the question: "What am I studying Compayré's History of Pedagogy for?" and to this he should try to obtain a clear answer. To do this let him read the several introductions of the "outlines" and of the work proper, the table of contents, and understand, above all, that "reading, to be of any value, must be translated into well-defined ideas of one's own, which he can state plainly and readily. If meanings of individual words and the general ideas are clear "memory will take care of itself."

As the great question of the day, excluding the greater question of professional teachers which is perennial, is manual training and manual training as a theory of education, we have endeavored to show elsewhere, is but the Froebelian theory, and this last but the outgrowth of Pestalozzi's work, we select as an example of these outlines the work of the seventh month (Chapters XVIII and XIX), which discusses the theories of these authors.

"SEVENTH MONTH.

"Chapters XVIII and XIX.—These parts of Compayré are chiefly devoted to Pestalozzi and Froebel. They are to be read with a view of getting a clear conception of what these two reformers contributed to the progress of education. One should bear in mind that school education is now well differentiated from other forms of development, and that progress consists in pushing forward one or another of the separate interests that make up the whole of education. Pestalozzi represents three ideas: 1. The improvement of the quality of teachers. 2. The advance of method. 3. A more complete definition of the purpose of education. To the end that one may see what Pestalozzi did to elevate the intelligence and character of the teacher, he should read:

"The account of the asylum for poor children at Neuhof.

"The outline of the Evening Hours of a Hermit, and Leonard and Gertrude. These works chiefly represent the author's attempts to define the true aim of education.

"The notice of the schools of Berthoud and Yverdun.

"Pestalozzi's contributions in aid of method appear in: Methods followed at Stanz, and Results accomplished. Methods Simplified. The Socratic Method. Word, Form, and Number. Intuitive Exercises. The Methods Yverdun. Essential Principles.

"Comparison of Rousseau and Pestalozzi.

"Froebel represents a continuation of the same ideas brought forward by Pestalozzi. But he has specialized by laying emphasis on the education of young children, and by advancing to great prominence the development of what he and his master Pestalozzi call individuality.

"These principles appear in: The analysis of The Education of Man; The Kindergartens; The Gifts of Froebel; The Principal Needs of the Child.

"Help questions.—In what sense is Pestalozzi a disciple of Rousseau? Point out the likeness between Pestalozzi and the Englishman Lancaster (p. 424). Did our reformer wish to make education mechanical? Why? (p. 428). What two principles may result from a combination of the three (p. 430)? What new device for teaching geography is first employed at Yverdun? Is Pestalozzi really or seemingly intellectually inferior to others who have filled similar high places? What is the practical lesson of his reform for us? [To learn to deal with the inner instead of playing superficially with the outer.]"

Administration.—"The management of the Indiana Teachers' Reading Circle," says its secretary, "is under the central control of a board of directors appointed by the State Teachers' Association, assisted by local managers in the several counties. The course of reading comprises two lines—professional and general culture studies. Examinations upon each year's work are held annually on the third Saturday of June, conducted by the county superintendents in the several counties. Much of the work of the circle forms a part of the monthly township institutes and is made a part of the township institute, outline published by the State superintendent.

"In December, 1886, the State superintendent was made *ex officio* a member of the central board, and under this provision Hon. J. W. Holcombe served as director till March 15, 1887, Hon. Harvey M. La Follette succeeding him.

"The board of directors consists of the following members and officers:

R. G. BOONE, Professor of Pedagogy, Indiana University.
 EMMA MONT MCRAE, Professor of Eng. Literature, Purdue University.
 MATTIE CURT DENNIS, Richmond.
 JOSEPH CARHART, Professor of English Literature, DePauw University.
 WM. H. ELSON, Superintendent Parke County Schools.
 L. H. JONES, Superintendent Indianapolis Schools.
 HARVEY M. LA FOLLETTE, Superintendent Public Instruction.
 D. M. GEETING, Deputy Superintendent Public Instruction.
 CALVIN MOON, Superintendent St. Joseph County Schools.

"During the first three years a membership and an examination fee, each of twenty-five cents, were charged. Ten cents of the former and fifteen cents of the latter went to the county manager as remuneration for his services and the remainder to the board of directors for its necessary expenses.

"In 1887 the discount usually allowed the trade by the publishers was given to the board and the levy of all fees was abolished.

"In this action the lowest quotable price was obtained upon books and furnished members free of transportation, and the discount paid to the board was sufficient to meet its expenses. This plan has not only secured better prices upon books, but saves the members the additional expense of fees. Had the fees been maintained prices of books could not have been lower; for the price to members is the lowest quotable price to dealers who handle them for the trade. This plan has proved entirely satisfactory and relieved county managers of the annoyance of collecting fees.

"Outlines of the books of the circle are prepared at the circle's expense, sent prepaid by express to county managers, who charge five cents each to members for each outline; this money repays the county manager for any outlay in ordering books and other incidental expenses.

"The county superintendent, who in nearly every case is county manager, has entire charge of the local management, and much praise is due these officers for the efficient manner in which the work has been conducted; the effectiveness of this management is shown in the growth of public sentiment that those who train the young should have a wider intellectual horizon.

"The following table shows the enrolment by years:

1884-5	1,600
1885-6	2,000
1886-7	2,500
1887-8	7,000

"The work of the circle reaches every county in the State, and, in thirty counties, almost every school district. In ten counties the work of the circle is made a part of the contract of every teacher.

"Several reasons may be given for this phenomenal growth: 1. The purpose of the organization is better understood. 2. The course has been lightened. 3. The expense of membership has been reduced. 4. The professional spirit is growing among teachers. 5. The co-operation of county managers is becoming personal as well as official."

YOUNG PEOPLE'S READING CIRCLE.

"This unique organization," says Mr. Geeting, "is one of the most promising agencies undertaken by our teachers to promote the general culture of the children and young people of the State. Agitated in 1887, its plans were perfected and presented to the teachers at the county institute of 1888, and now (December 1, 1888) it has a membership of several thousands.

"On December 28, 1887, Prof. Joseph Carhart, professor of English literature in De Pauw University, read a paper before the Teachers' Association (to be found in full in Indiana School Journal of March, 1888) discussing the subject of children's reading at length. As a result of the paper ten thousand tablets setting forth the origin and plan of the organization were printed and distributed by the order of the board of directors. Each tablet contained twenty-one pages, the first page being as follows:

YOUNG PEOPLE'S READING CIRCLE OF INDIANA,

[Organized by the State Teachers' Association, 1887.]

BOARD OF DIRECTORS.

R. G. BOONE, Professor of Pedagogy, Indiana University.
 EMMA MONT McRAE, Professor of English Literature, Purdue University.
 MATTIE CURT DUNN, Richmond.
 JOSEPH CARHART, Professor of English Literature, De Pauw University.
 WM. H. ELSON, Superintendent Parke County Schools.
 L. H. JONES, Superintendent Indianapolis Schools.
 HARVEY M. LA FOLLETTE, Superintendent Public Instruction.
 D. M. GEETING, Deputy Superintendent Public Instruction.
 CALVIN MOON, Superintendent St. Joseph County Schools.

OFFICERS OF THE BOARD.

Professor R. G. BOONE, Bloomington, President.
 Mr. D. M. GEETING, Indianapolis, Secretary.

TO TEACHERS:

"What to read is a far more important question than *how to read*. When a child has acquired the power to read, a vast and before unknowable world opens up before him. On the one hand are means of culture in what is good and great, which impose new duties of unselfish living and excite high ideals through high examples; and on the other hand are possibilities of degradation of many kinds, mental and moral, unknown before. The school has no right to teach how to read without doing much more than it now does to direct the taste and confirm the habit of reading what is good rather than what is bad. The prime object of reading should be the development of a living appreciation of good literature and the habit of reading it rather than the bad, for with this end all others are secured."—*Prof. G. Stanley Hall, Johns Hopkins University.*

"It seems to me that one part of the work of the teacher ought to be to direct the reading of the children. I hope the teachers of this State, so cultivated, so full of zeal and earnestness, will not only teach in school, but will endeavor to direct the reading of their pupils, in order that they become so interested that their evenings will not be spent among vicious associates, but in useful reading."—*Ex-Governor A. G. Porter, to the Indiana Teachers' Association, December, 1886.*

"As a protection against the seductions of the saloon and other places of questionable resort, a taste for and a habit of acquiring common, useful information is so valuable to our young people that it does not profane the Sabbath or prostitute the pulpit to recommend the reading circle."—*A. Martin, President De Pauw University.*

The Indiana Teachers' Association, December 30, 1887, unanimously adopted the following report of the special committee named below, who were appointed to consider the question of organizing a Reading Circle for the school children of the State:

"Your committee, to whom was referred the subject of organizing a Children's Reading Circle, beg leave to report as follows:

"We regard the subject one of the highest importance. To place the general reading of the half million children of the public schools under competent guidance and control, even to a limited extent, would, in our judgment, be productive of most beneficial results. To substitute for the trashy and often vicious reading matter, which finds its way into the hands of the children and youth, a grade of literature, at once sound in its contents, chaste in language and imagery, and pure in its moral tone, is an end which may properly command the best and most earnest efforts of this association, and of the teachers of Indiana. To your committee the enterprise proposed seems a means for accomplishing, in a measure, this highly desirable end. * * * * *

Signed:

W. W. PARSONS, Pres. State Normal School;
 C. W. HODGIN, Prof. of History, Earlham College;
 W. B. OWEN, Superintendent Edinburg Schools;
Committee.

The work of perfecting the organization was referred to the board of directors named above, who earnestly solicit the co-operation of all school officers, teachers, and parents in carrying out the high purpose of the Teachers' Association. The plan set forth in these announcements is a simple one, and it can be modified to suit the peculiar conditions of particular localities, but a standard is here set up which, it is believed, every locality can practically reach. The reading of one good book by each child during the year would be an inestimable blessing, but many, perhaps most, will desire to do more, so there is added to the principal book selected for each grade a supplementary list. It will be observed, on comparing the prices here given with the regular retail prices of the books, that publishers have made very liberal discounts to members of the circle.

Through the local press, by enlisting the ministers of their community, and by conducting special school exercises adapted to the purpose, many teachers will do much more than is here proposed to promote the success of the circle, but it is confidently believed that great good will result from taking the simple steps indicated in the accompanying circulars. It is suggested that after your school has become organized you call the attention of the children to the Young People's Reading Circle, and distribute the slips containing suggestions to parents and pupils, with the request that they present them to their parents and promptly report to you the result. The certificate of membership, signed by the president and secretary of the board, is to be issued when the pupil has read at least one of the prescribed books. By filling out the blank, "to be forwarded to the secretary," you will assist in accumulating information that will be helpful in determining the course for next year.

A Young People's Reading Circle Department is to be conducted in the Indiana School Journal that will give each month interesting items concerning the progress of the work. Any information concerning the circle, such as the number of members enrolled in each grade, the means employed to secure the membership, the influence of the circle upon the children, etc., will be thankfully received by Professor Carhart, Greencastle, who has been appointed to conduct the department in the Journal. Additional tablets may be obtained by addressing the secretary of the board.

Each tablet also contained twenty duplicates of the following page:

To be filled out and forwarded to Mr. D. M. Geeting, Indianapolis, Secretary, when the local membership for the year is complete.

Name of member.....
 Grade of member.....
 P. O. address of member.....
 Indicate by a cross (+) the books taken from the following list:
 Seaside and Wayside, Seven Little Sisters, Friends in Feathers and Fur;
 Heroic Deeds, Swiss Family Robinson, Pilgrims and Puritans, Ten Great
 Events in History, Birds and Bees, Robinson Crusoe, Neighbors With
 Claws and Hoofs, Ten Little Boys;
 Washington and His Country, Animal Life in the Sea and on the Land,
 Tales From Shakespeare, Franklin's Autobiography, Plutarch's Lives,
 Glimpses of the Animate World.
 Name of teacher.....
 P. O. address

*This Certifies that.....
 is a member of the Young People's Reading Circle
 of Indiana, 1889.*

"READ, REFLECT, APPLY."

"From a child I was fond of reading."—BENJ. FRANKLIN.

[Signed.]

R. G. Boone, President.

D. M. Geeting, Secretary.

TO PARENTS AND PUPILS:

"A child that has a fondness for reading has no desire to be among vicious associates. I believe that the best preparation of a boy for a virtuous life is to interest him in good reading."—Ex-Governor A. G. Porter to Indiana Teachers' Association, 1880.

"In my opinion the boy who leaves at the end of a common school course with a love of reading good books is better prepared for a life of honor and influence than one who passes through a high school course without that love. And he who has an ordinary high school education, combined with a taste for good reading, is better equipped for the duties of life than the graduate of the best college or university in the country, without that taste."—Hon. J. B. Peaslee, for twelve years Superintendent of the Public Schools of Cincinnati.

"From a child I was fond of reading, and all the little money that came into my hands was laid out in books."—Benj. Franklin.

"The true university of these days is a collection of books."—Thomas Carlyle.

YOUNG PEOPLE'S READING CIRCLE OF INDIANA.

Organized by the State Teachers' Association, 1887.

BOARD OF DIRECTORS.

R. G. BOONE, Professor of Pedagogy, Indiana University.

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MATTIE CURT DEXNIS, Richmond.

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L. H. JONES, Superintendent Indianapolis Schools.

HARVEY M. LA FOLLETTE, Superintendent Public Instruction.

D. M. GEETING, Deputy Superintendent Public Instruction.

CALVIN MOON, Superintendent St. Joseph County Schools.

If you desire to co-operate with the teachers of the State in an effort to direct the tastes of the children and to confirm them in the habit of reading good books, please draw a line under the titles of any books you may desire in the accompanying list, and return this paper to the teacher, who will sign the same, thus entitling the holder to books at the reduced prices named. To secure the books at the prices given, this certificate must accompany the order. Send direct to the publishers, enclosing the price, and the books will be sent by mail. The price of the book in every case includes postage or expressage on the same. Remittances may be made by money order, postal note, or postage stamps.

This certifies that.....
 of.....
 is a member of the Young People's Reading Circle of Indiana.
 Signed.....Teacher,
Post-office.

List of books for 1888-89.

Third Reader Grade—Seaside and Wayside, price, 40 cents, D. C. Heath & Co., Chicago. Supplementary: The Seven Little Sisters Who Live on the Round Ball that Floats in the Air, price, 50 cents, Lee & Shepard, Boston. Friends in Feathers and Fur, price, 33 cents, D. Appleton & Co., Chicago.

Fourth Reader—Stories of Heroic Deeds, price, 33 cents, D. Appleton & Co., Chicago; or, Swiss Family Robinson, price, 33 cents, Ginn & Co., Chicago. Supplementary: Pilgrims and Puritans, price, 60 cents, Ginn & Co., Chicago. Ten Great Events in History, price, 60 cents, D. Appleton & Co., Chicago. Birds and Bees, price (in paper), 15 cents, Houghton, Mifflin & Co., Boston. Robinson Crusoe, price, 35 cents, Ginn & Co., Chicago. Neighbors With Claws and Hoofs, price, 60 cents, D. Appleton & Co., Chicago. Ten Little Boys on the Road From Long Ago to Now, price, 80 cents, Lee & Shepard, Boston.

Fifth Reader Grade—Washington and His Country, price, 75 cents, Ginn & Co., Chicago. Supplementary: Animal Life in the Sea and on the Land, price, \$1.15, Harper & Brothers, New York. Tales From Shakespeare, price, 38 cents, Ginn & Co., Chicago. Franklin's Autobiography, price, 35 cents, Houghton, Mifflin & Co., Boston. Plutarch's Lives, price, 38 cents, Ginn & Co., Chicago. Glimpses of the Animate World, price, \$1.10, D. Appleton & Co., Chicago.

"The hearty and intelligent co-operation of all county superintendents, teachers, the press generally, and especially the Indiana School Journal, gives encouraging assurance that through the Young People's Reading Circle thousands of children who would otherwise either do no reading outside of school text-books or would read trashy and vicious literature will have their lives encircled by the best thought and feeling of the world's best men and women."

IOWA.

At the meeting of the Iowa Teachers' Association in 1884 the president of that body recommended the organization of a teachers' reading circle on the ground that "there ought to be a course of reading adapted to the needs of every teacher who wishes to acquire excellence." From the action taken at this meeting the circle arose.

Purpose.—1. The objects of the reading circle shall be, says the plan of organization, the improvement of its members in literary, scientific, and professional knowledge and the promotion of habits of self-culture. 2. Any teacher or other resident of Iowa may become a member of the circle by signing a pledge to faithfully pursue the prescribed course of reading, and by the payment, in advance, of the membership fee.

Course.—The course of reading covers a period of four years, and consists of selections from three departments: History and art, general and professional; literature, general and professional; science, physical, natural, social, mental, and moral.

The committees on reading recommend to the board books for reading in their respective departments. The board arranges for reviews at the close of each year's course, to be conducted by the county manager. Any person having certified to the careful reading will receive a certificate from the board showing that he has completed the course for the year, and to all, who in like manner complete the work laid out for four years, a diploma will be issued.

Touching the very important question of time, presupposing the inclination, for pursuing this course the management observe:

"By busy people, both men and women, only a short time can be spared each day for reading. Yet no one can afford to use his spare moments for reading without aim or system. It is, therefore, proposed to select a few subjects and choose books which present in a popular manner fundamental facts and principles. All members will read these books; some will read much more.

"It has been the aim to select books suited to the wants of Iowa teachers, and all others who want a better education, but can not get it in school; such books as will inspire a love of reading for the culture it brings. An average of forty minutes' reading each week day will enable the student in nine months to complete the books selected for one year."

In the first circular issued is given this course of reading for the first year:

	Regular price.	Price to members.
HISTORY AND ART. { General: Barnes' Brief General History.....	\$2.00	\$1.40
	Professional:	
LITERATURE. { General: Richardson's American Literature Primer.....	.35	.25
	Professional: Page's Theory and Practice of Teaching.....	1.25 .90
	{ Hunt's Physiology and Hygiene for Young People.....	.65 .50
SCIENCE. { Or, The Eclectic (new), Van Antwerp, Bragg & Co.....	.80	.50
	Physical: Balfour Stewart's Physics.....	.45 .35
	Mental: Watts' Improvement of the Mind (new edition).....	.....

Second, third, and fourth years not yet determined.

In the circular for May, 1887, the last at hand, the four years' course of reading is grouped thus, the course of each year being considered the first year for new students:

FOUR YEARS' COURSE OF READING.

1887-88.	1888-89.	1889-90.	1890-91.
History of Education. Biography. Natural History. Political Economy. Civil Government. General Literature.	Science of Education. U. S. History. Astronomy. Political Science. Physiology. American Literature.	Educational Systems. History of Greece and Rome. Chemistry of Common Life. Mental Science. Physical Culture. English Literature.	Educational Methods. History of England and Germany. Geology and Botany. Moral Science. Christian Evidences or Social Science. Art.

The above outline of future work is subject to such changes as the board of directors may deem necessary and is additional to the two years' courses announced in previous circulars.

COURSE FOR 1887-88.

1. { History of Education..... *F. V. N. Painter.*
History of Pedagogy..... *Gabriel Compayré.*
Contributions to the Science of Education..... *W. H. Payne.*
2. { Biographical—Great Lives..... *J. I. Mombert.*
Natural History (from page 279)..... *J. G. Wood.*
3. { Outline Study of Political Economy..... *G. M. Steele.*
Political Economy..... *J. M. Gregory.*
Political Economy..... *Chapin's Wayland.*
4. { Principles of Hygiene..... *Ezra M. Hunt.*
Our Government..... *Jesse Macy.*
History and Civil Government of Iowa..... *Geo. Chandler.*
5. Literature—Selections from Hawthorne, Holmes, Irving, Longfellow. Not less than 400 pages.

Any four of the above five topics may be selected, and one book from each selected topic may be chosen, which will constitute the course of reading for the year. Two books may be read each half year, or three if the smaller works be selected. County uniformity is recommended.

Administration.—The Iowa Teachers' Reading Circle, as before remarked, originated in the annual meeting of the State Teachers' Association, held at Des Moines, December 22-24, 1884. The association appointed a committee of nine members, three chosen from each department of the association, with authority to organize a State reading circle, arrange a course of reading, provide for forming local circles, and put the plan into execution; this committee became the board of directors.

The board appoints the county superintendent, or a special deputy in each county as county manager, who shall enroll members, organize local circles of four or more members, receive membership fees and remit monthly to the treasurer of the board, furnish information, distribute books, and have the general direction of the work in his county.

County managers are urged to take the lead in organizing circles in their respective counties. They may call teachers and other interested persons together at any time and explain the objects of the circle, the course of reading to be pursued, and the advantages to be derived. They should advise and assist in organizing new circles, supply them with the necessary blanks, and aid in procuring the needed books.

Any person wishing to organize a local circle may take the names of those who wish to join and send to the county manager. He will receive in return the necessary circulars, blanks, and suggestions for organizing. If there be no county manager the names may be sent direct to the secretary at Davenport.

A leader is to be appointed to enroll members, secure pledges, forward membership fees, and arrange for procuring books, and for future meetings.

Every meeting should be appointed for a definite hour, and all members from the beginning should plan to be on time. The roll should be called and a record made of the attendance, after which the time should be occupied according to a previously arranged programme of readings, questions, reviews, geographical, historical, biographical, or other reference. Dictionaries, maps, and other attainable works of reference may be consulted with advantage.

Methods of conducting local circles are given in the school journals of the State.

Before being admitted the applicant must subscribe to a pledge conceived in the following terms:

"I hereby engage to enter upon and faithfully pursue for one year or more the course of reading as outlined for the Iowa Teachers' Reading Circle."

To defray the expenses of correspondence and printing, and provide for other necessary expenditures an annual fee of 50 cents is asked from each member. If paid in advance, 75 cents will constitute the fee for two years. It is a small amount to the individual members, and its prompt payment and remittance will enable the board to pay necessary bills and plan for the best efficiency and growth of the circle.

The annual membership fees are due September 1, but the fees for new memberships paid after May 1 may be accredited to the ensuing year.

The secretary of the circle, Mr. F. E. Stratton, has kindly furnished a copy of his last report, in which he takes a hopeful view of the prospects of the circle, while repeating the call for enthusiasm already noted in California and several other States.

KANSAS.

The reading circle of Kansas is undergoing reorganization to become a branch of the Chautauqua Teachers' Reading Circle. But its history as an independent body, from its organization, in May, 1885, to the present, deserves mention.

Purpose.—"This circle proposes to all classes of readers a plan of mutual assistance in the work of self-culture by outlining courses of reading and study by securing reduced rates on books, by publishing lists of excellent publications interesting to its members, by suggesting methods of work, and by supplying the incentive of association in study and examination."

Membership seems to be open to all who pay the annual fee of 50 cents.

Course.—Members are not compelled to take any one full course or division; the utmost freedom of selection is recognized. One may take a "teachers' general course," another a "literary relief course," still another a little of both, or apply for more general recommendation.

The teachers' general course is divided into—

FIRST DIVISION.—Kiddle's How to Teach, Page's Theory and Practice, Barnes' General History.

SECOND DIVISION.—Hewett's Pedagogy, Fitch's Lectures on Teaching, Gregory's Political Economy.

THIRD DIVISION.—Bain's Education as a Science, Sully's Psychology (ed.) abridged, Swinton's Classical English Reader.

The "literature relief course" (as distinguished, presumably, from the more irksome professional course) is also grouped in three divisions, as follows:

FIRST DIVISION.—Goldsmith's Deserted Village, 1st mo.; Coleridge's Ancient Mariner, 2d mo.; Irving's Sketch Book, 3d mo.; Lamb's Tales from Shakespeare, 4th mo.; Chas. Kingsley's Westward, Ho!, 5th and 6th mos.

SECOND DIVISION.—Hawthorne's Tales of a Grandfather, Part I, 1st mo.; Part II, 2d mo.; Part III, 3d mo.; Hawthorne's Biographical Stories, 4th mo.; David Copperfield, 5th and 6th mos.

THIRD DIVISION.—Merchant of Venice, 1st mo.; Macbeth, 2d mo.; Tempest, 3d mo.; Pope's Essay on Criticism, 4th mo.; Henry Esmond, 5th and 6th mos.

In addition to these there is, or was, a "juvenile course" which was recommended to teachers for introducing a course of reading to the attention of the young in their several school districts, as follows:

FIRST GROUP.—Tales of a Grandfather, by Sir Walter Scott; Robinson Crusoe, Book of Fables, Jno. B. Alden, publisher, N. Y.

SECOND GROUP.—Eminent Americans, Dickens' Child's History of England, Jno. B. Alden, publisher, N. Y.; Arabian Nights, edited by Rev. E. E. Hale.

THIRD GROUP.—Pilgrim's Progress, Creasy's Decisive Battles, Hawthorne's Grandfather's Chair.

Administration.—The management is a board of five directors elected annually. Any association might organize itself as a county reading circle by electing a county secretary, and local circles subordinate to these might also be formed.

The annual fee gave the member the privilege of obtaining the books of the course at reduced prices, the various circulars of suggestion and information issued from time to time and of examination semi-annually. A certain portion of the membership fee is retained by the county secretary, who remits the residue to the treasurer of the board of directors.

Before speaking of the change now being instituted a quotation is given from a letter of Mr. Hill, the secretary of the reorganized circle, and to whom our thanks are due for information on this subject:

"Under the old organization about forty circles were formed, with a membership aggregating not quite 800. But few circles are now in existence, though the interest man-

ifested indicates a prosperous career for the new organization. But little has been done for over a year past."

The change now taking place is fully explained by the following circular:

CHAUTAUQUA UNIVERSITY.

C. T. R. U.

THE KANSAS STATE TEACHERS' READING CIRCLE.

A. R. TAYLOR, *President*.Emporia.

F. H. CLARK, *Vice-President*, Minneapolis.

J. H. HILL, *Secretary*Emporia.

EMPORIA, KANSAS, November 16, 1888.

To the Teachers of Kansas:

After numerous unavoidable delays—delays arising from the change of secretaries, the continued illness of the general secretary of the Chautauqua Teachers' Reading Union, and other causes for which the officers of the Kansas Circle are not responsible—we are glad to be able, in accordance with the instructions of the friends of the Kansas State Teachers' Reading Circle at their last meeting at Topeka, to give in the accompanying circular full and definite suggestions embodying the information desired as to the organization of Teachers' Reading Circles auxiliary to the Chautauqua Teachers' Reading Union. * * *

The advantages of belonging to a national organization like the C. T. R. U., which is a department of the Chautauqua University, need scarcely be enumerated. Among them are the recognition of the work done by the diploma given, signed by the officers of the University; the opportunity for reduced rates in the purchase of books in the course of reading; the privilege of the Socratic League, including the gratuitous receipt of the Socratic League leaflets; the suggestion of the post-graduate and collateral courses in addition to the prescribed work, with due recognition of the same; and, above all, the inspiration, sympathy, and assistance of a multitude of co-readers, as an incentive to the noblest effort. The State organization exists simply for the purpose of giving all possible co-operation and suggestion to facilitate the organization of local circles—thus furthering by the agencies at its command this noble movement for self-culture. All the advantages of the former State organization are preserved, while much is gained by the transfer of a large part of its machinery to the National Union. Shall we not have from the Kansas teachers a general response, and with the new year see our reading circles in active operation all over the State? * * *

J. H. HILL,
Secretary, Emporia, Kansas.

A. R. TAYLOR,
President.

MARYLAND.

This circle is but a thing of yesterday. The present chairman of its board of directors was selected to read a paper on Reading Circles at the meeting of the teachers' association in July, 1888, which led to the organization explained in the following circular, which Prof. Alex. Chaplain has kindly furnished:

Baltimore, August 23rd, 1888.

To the Examiner of County:

DEAR SIR:

At the last meeting of the State Teachers' Association the advisability of organizing a State Teachers' Reading Circle was fully discussed and decided upon, and a board of directors, consisting of the following persons, Prof. Alex. Chaplain, Easton; Prof. Jacob Goodman, and Mrs. M. A. Newell, Baltimore, was appointed for the inauguration and management of the same.

The duties of the directors are to prescribe and to outline, if necessary, a course of reading, to arrange examinations, and to attend to all the literary and business interests of the circle.

One of the great needs—perhaps the greatest need of our teachers—is more extensive culture. Many of them, while possessing fine disciplinary ability, perseverance, patience, and conscientiousness, are wanting in the general information so essential to the successful prosecution of their work. To supply this want, to some extent at least, is the prime object of the reading circle.

Aside from the great good that would result to our schools and communities from the more liberal cultivation of our teachers, there is another important consideration—along with the increase of knowledge, the profession would increase in dignity and importance and would advance to a higher platform of social, intellectual, and political recognition—in short, would become the power in the land, which it deserves to be.

Believing that the success of this effort depends very largely upon the co-operation of the examiners, the directors confidently appeal to you. Will you not use all the means in your power to awaken the interest of the teachers in your county? We would suggest that you send a circular letter to them setting forth your opinion of the importance of this work and urging them to connect themselves with it.

The fee for membership is 25 cents per annum. The books prescribed by the directors will be furnished the teachers at reduced rates.

The first meeting of the board of directors was held at the State Normal School Thursday, August 23, 1888, at which meeting the enclosed suggestions were adopted and a course of reading, embracing general culture, pedagogics, and mental philosophy, agreed upon for the first year. Full particulars regarding the price, etc., of the necessary books will be furnished in a later circular.

We shall be pleased to hear from you in this connection and shall be grateful for any suggestions you may offer. Please oblige us by a reply by the 10th of September. All communications must be addressed to Mrs. M. A. Newell, State Normal School, Baltimore.

By order of the board.

CHARLOTTE NEWELL,
Secretary.

The board of directors, each member of which is chosen for three years, selected at their first meeting the course of reading for the first year. In pedagogy this consists of Swett's *Methods of Teaching*; in mental philosophy, Allen's *Mind Studies for Young Teachers*; in general culture, Mackenzie's *History of the Nineteenth Century*. To "outline" one of these works was the duty of a member of the board. To Mr. Chaplain was entrusted Swett's *Methods*; to Mr. Goodman, Allen's *Mind Studies*, and to Mrs. Newell, Mackenzie's *Nineteenth Century*. From the "outlines" of the last work is selected the following illustration. The matter refers to the third part of the first chapter of Mackenzie's work:

"Part III—1778.—Locate Ferney.

"Rousseau; his influence; the style and character of his principal work, *Émile*.

"Necker; the public positions held by him; his *compte rendu*; his daughter, Madame de Staël.

"The American Revolution in its probable relations to the French Revolution.

"Lafayette; his influence in hastening the French Revolution; his connection with American affairs as a factor in determining his subsequent opinions and actions.

"Benjamin Franklin; illustrate through him the effect of perseverance and energy; his influence at the French court. Give a brief sketch of the discoveries in electricity prior to Franklin.

"*Books of Reference.*—Lives of the Most Eminent French Writers, by Mrs. Shelley; Green's *Short History of the English People*; Thier's *French Revolution*; Headley's *Life of Lafayette*; McMaster's *Life of Benjamin Franklin*, in the *American Men of Letters Series*."

As few reports have been received as yet by the board of directors no positive statement can be made as to the membership, but it is estimated at 2,000.

MICHIGAN.

Information from this State is succinct though not encouraging. "The reading circle has ceased to be an organization in this State," says Superintendent David Howell, of Lansing.

MINNESOTA.

State Superintendent Kiehle writes: "A State teachers' reading circle was organized in Minnesota, but was soon abandoned on account of the difficulties attending a successful organization."

MISSISSIPPI.

Principal Haven, of the Winona Academy, reports under date of December 19, 1888, that the teachers of Mississippi have failed so far to effect a regular organization in the State. "The Teachers' Association," says Mr. Haven, "convenes on the 28th and 29th inst. and it may be that we will go into regular organization at that time. * * * I enclose you our circular to the teachers, which will give you about all that has been done as yet."

From this circular it is learned that at the meeting of the State Teachers' Association held at Jackson, Miss., December 27-29, 1887, a resolution was adopted by unanimous vote favoring the immediate organization of a State Reading Circle. A committee was appointed to effect this organization.

Purpose.—It is the purpose of this Reading Circle to arouse a spirit of reading among the teachers of the State, and thus to elevate the standard of scholarship and improve the teachers and the schools. It is also desired to bring about a community of feeling and interest; to secure a better understanding of the laws of the child's mental, moral, and physical being, and to bring the teacher nearer to a true profession.

"All this can be easily secured if the county superintendents and leading teachers will determine to have it so; and it is hoped that the superintendents will not let their teachers rest until there is a working organization in every county of the State. It will be of incalculable benefit to the teachers in bringing before them the true greatness of the work in which they are engaged and in preparing them for better schools, more constant employment, and more remunerative returns for their work.

"Teachers, like pupils, need stimulating. They do better work when they feel the necessity for it. May we not hope that the committee will be able to report fifty or sixty counties with organized circles at the next annual meeting of the State? It is possible; it is very desirable; it will be most profitable."

Course.—The work of the first year has been arranged to consist of the following studies:

	Usual.	Special.
1. Page's Theory and Practice of Teaching.....	\$1.25	\$1.00
2. Watts on the Improvement of the Mind.....	.75	.65
3. Miss Duval's History of Mississippi.....	1.00	.60

The work of the first year is but the beginning. For each successive year additional work will be arranged. Thus the teacher will be supplied with an excellent working library of valuable books, gathered little by little and carefully studied in detail. Membership in the circle will enable teachers to secure these books at a very considerable reduction from the rates at which they are generally sold.

The outlines of the work will be published for each month in advance in the Mississippi Teacher. They will be of great value to every member of the circle. The Mississippi Teacher is, by action of the State Teachers' Association, the State official organ, and as such should be in the hands of every teacher in the State.

Administration.—The management of the affairs of the circle seems to be as yet vested in the committee of nine, which was appointed to effect an organization. The reading circle year is to begin with the first day of March, 1888, and consist of the nine months next following that date.

Inquiries relative to the circle and its work may be addressed to any member of the committee. A stamp should be inclosed for reply.

MISSOURI.

"There is nothing being done in the way of teachers' reading circles, either State or local," says the State superintendent.

NEBRASKA.

"To the best of my knowledge this matter has been generally neglected in Nebraska for the last two years," says State Superintendent Lane. "The public school teachers are giving the time formerly devoted to the reading circle to professional study, while the Chautauqua circle seems to attract others."

NEW JERSEY.

The Bureau was promised an article on this subject from a competent hand, but unfortunately the promise could not be kept.

NEW YORK.

The report which Mr. Jerome Allen, of New York City, has furnished, at the request of the State superintendent, is as follows:

"The reading circle of this State is not at present in a very active condition. It would be impossible for me to state all the causes for this circumstance, but I will say in brief it is mainly from want of interest in professional reading on the part of the rank and file of the teachers. The graduates of colleges and normal schools do not feel an interest in this reading, as they have already laid out a course of study and are pursuing that independent of any reading circle. The younger teachers who remain in the work but a short time and receive at best only second-grade certificates have no interest to improve themselves. They are living up to the demands of the community they are in, and, not intending to make teaching a life-work, they do not exert themselves to improve.

"In my opinion reading circles should receive definite encouragement from the State superintendent of public instruction. A law should be passed authorizing him to give certain certificates to those who complete specified reading work laid down by the department. This might or might not be a prerequisite to the obtaining of a State certificate. If in some way it could be connected with State recognition it would be of great use. But an organization without State recognition, or any public encouragement, stands very little chance of meeting with success in this State. The effort has been made earnestly and thoroughly, and although the outlook of the New York State Reading Circle seemed at first to be promising, yet the result has shown that it did not meet with that encouragement from the teachers and officers that was necessary in order to make it a complete success."

NORTH CAROLINA.

"We have but one circle," says the State superintendent, "and it is connected with the assembly [Teachers' Association of the State]." Subsequent enquiries have failed to elicit further information.

OHIO.

It may be inferred that the Ohio circle is strictly a teachers' organization from the following extract from its last circular:

"While our organization is known as a Teachers' Reading Circle, its work is of special value to all who are intending to become teachers.

"A large number of pupils who have recently completed the course of study in the high schools of our State expect to engage in the work of teaching. To all such the reading circle offers an excellent opportunity for further improvement and for some degree of special preparation for their important work."

Course.—The success of the reading circle during the past year has been such as to warrant the board of control in arranging work for a sixth year. Nearly two hundred diplomas have already been given to those who have completed the work of four years. The receipts of the treasurer for the past year indicate a paid membership of more than one thousand, and the reports from the various counties show that fifteen hundred teachers have taken the course as a whole or in part.

In order that the work of the coming year may be made more interesting and valuable to members the board of control has arranged with different persons to furnish a series of helpful articles upon the subjects presented in the different departments of the course. These articles will appear from month to month in the columns of the *Educational Monthly*, beginning with the September number.

The work should be commenced in the early part of the school year in order that it may be completed in June.

Readers may begin with any year they choose. Certificates are given to all members who complete in a satisfactory manner the work of any year. Those who complete the work of any four years are entitled to a diploma without additional payment. The diplomas are presented at the annual meeting of the Ohio State Teachers' Association.

All members who are entitled to diplomas and who wish to receive them should send their names to the corresponding secretary of the board of control on or before June 1, in order that they may be properly prepared in advance of the meeting.

COURSE OF READING SELECTED FOR THE SIXTH YEAR (1888-89).

- I. PEDAGOGY.—Compyré's Lectures on Teaching, or Calderwood on Teaching.
- II. LITERATURE.—Shakespeare's Henry IV, Irving's Knickerbocker's History of New York, and Macaulay's Essay on Warren Hastings.

III. HISTORY.—A selection from the "Old South Leaflets," as follows: No. 1. Constitution of the United States. 2. Articles of Confederation. 4. Washington's Farewell Address. 5. Magna Charta. 10. Washington's Inaugurals. 11. Lincoln's Inaugurals and Emancipation Proclamation. 12. The Federalist, Nos. 1, 2, and 3. 13. The Ordinance of 1787.
The Constitution of Ohio published in leaflet for the special use of the Ohio Teachers' Reading Circle.

COURSE OF READING PREVIOUSLY ADOPTED.

FIRST YEAR—1833-34.

- I. In PEDAGOGY, one of the following: Hailman's History of Pedagogy, Krusi's Pestalozzi, Quick's Educational Reformers.
- II. In ENGLISH POETRY, one of the following: Longfellow, Whittier, Lowell—life and poetical works.
- III. In AMERICAN HISTORY, the discovery and early settlement of North America, to 1776.

SECOND YEAR—1834-35.

- I. PEDAGOGY.—Currie's Common School Education, or Calderwood on Teaching.
- II. LITERATURE.—Shakespeare's Julius Cæsar, and Irving's Sketch Book.
- III. U. S. HISTORY.—The Revolution and the Constitutional Period to the close of the War of 1812.
- IV. NATURAL SCIENCE.—Brown's Physiology, or Science Primer of Physiology and Hygiene.

THIRD YEAR—1835-36.

- I. PEDAGOGY.—Payne's Lectures on the Science and Art of Education.
- II. LITERATURE.—Shakespeare's Richard III, and the Merchant of Venice, Scott's Ivanhoe, and Tennyson's Princess.
- III. HISTORY.—United States History from the close of the War of 1812 to the present time.
- IV. NATURAL SCIENCE.—The Science Primer of Physics by Balfour Stewart.

FOURTH YEAR—1836-37.

- I. PEDAGOGY.—Sully's Teacher's Hand-Book of Psychology.
- II. LITERATURE.—Shakespeare's Hamlet, and As You Like It, Selections from Wordsworth.
- III. HISTORY.—Barnes' Brief General History of the World, or Thalheimer's General History.
- IV. POLITICAL ECONOMY.—Gregory's Political Economy, or Chapin's First Principles of Political Economy.

FIFTH YEAR—1837-38.

- I. PEDAGOGY.—White's Elements of Pedagogy.
- II. LITERATURE.—Shakespeare's Henry VIII, and Hawthorne's Twice Told Tales.
- III. HISTORY.—Any brief history of the United States to be supplemented by the History of Ohio. (Barnes' General History of the World, for such as have begun but not completed it, may be taken as a substitute for the history of the United States.)
- IV. Gregory's Political Economy or Chapin's First Principles of Political Economy.

Administration.—There is no constitution, nor are there by-laws for the State circle, the local circle adopting its own form of government. The governing body is a board of control composed of nine members, one of whom, the State commissioner of public schools, has membership by reason of his office.

Every member of the reading circle is expected to pay each year a membership fee of 25 cents. This should be paid at the beginning of the year, when the circle is organized, to the treasurer of the local circle, and should be transmitted by him to the corresponding secretary for the county, who will remit the same to the treasurer of the board of control. Individual membership receipt blanks will be furnished to each county.

In the circular for 1838-39, the board of control say:

"The amount received for membership fees is absolutely needed to meet the expenses of the reading-circle. As parchment diplomas are now given, the expense is much greater than heretofore. We have had in the past many readers who were not members. It is hoped that in the future all readers will pay the small fee that is required, and thus become members of the State circle, and help to defray the necessary expenses of the organization.

"In counties where there are no local circles individuals can read the course, and by re-mitting their membership dues directly to the treasurer of the board of control they will be recorded as members of the Ohio Teachers' Reading Circle.

"The board of control requests the teachers of each county to elect at their next institute a corresponding member, and to report the name at once to the corresponding secretary of the board. It will be the duty of the member thus elected to superintend the organization of local circles, to distribute such circulars and documents as may be issued by the board from time to time, and to procure and fill out certificates for those who desire them. He should also make an annual statement to the corresponding secretary of the board of control of the number of local circles and members, and of the work done in

the county during the year. This report should be sent to the secretary not later than the middle of June, in order that he may make a full report to the Ohio Teachers' Association at the State meeting. Blanks are furnished for this report, as well as for a preliminary report from each county branch or local circle."

OREGON.

A letter from State Superintendent McElroy says: "Very little has been done so far in this State relative to the establishment of teachers' reading circles.

"The school work of this State is yet in a formative condition, and we have had so much pioneer labor to perform that we have not been able to take many of the advanced steps in education.

"We realize the great importance of reading organizations in this country, and we hope to secure some favorable legislation in this direction at the coming session of the Legislature."

Mr. McElroy then refers to several ladies and gentlemen of the State, but from those addressed nothing has as yet been received.

RHODE ISLAND.

Rhode Island, though small, does not lack individuality. Its teachers' association is called an Institute of Instruction, and has for its object the improvement of the public schools of the State, and every member of the Rhode Island Institute of Instruction is a member of the Reading Circle. There are no extra fees. It is recommended that each shall read at least one volume in Pedagogy. By reading three pages a day, five days in the week, one can read a volume of four hundred pages before the next annual meeting in October. Those who are teaching history, literature, or any subject in the other departments, will find it helpful to read the books recommended by the directors of those departments. The directors will be glad to answer any inquiries or to give further information to any who desire it, in relation to books, methods of study, or other points of interest in their departments.

The following are the various departments and the books recommended in each:

I. PEDAGOGY.

THOMAS B. STOCKWELL, director.

Rousseau's *Émile* or Pestalozzi's *Leonard and Gertrude*. Published by D. C. Heath & Co., Boston. Price, 75 cents each.

Prince's *Courses and Methods*. Published by Ginn & Co., Boston. Price, 75 cents.

The course of reading recommended for the ensuing year is a double one, combining both theory and practice. In the first two books recommended we have the substance in an attractive form of two educational classics. There is little in modern pedagogy that does not go back to Rousseau and Pestalozzi, and it has seemed to me wise to direct the attention of teachers to these two sources of the present system of educational training and culture.

Émile is the earlier in point of time and is more thorough in its treatment of the subject, covering the whole province of education from birth to youth. There is but little pretense to a story, although it is called a romance. There are positions taken from which we shall probably dissent, but on the other hand, we shall be surprised to find how much there is with which we shall agree.

Leonard and Gertrude is quite an entertaining story of peasant life in Europe which shows how the introduction of correct principles of life and action, especially in connection with the training of the young, may reform a community and impart to it a new and a higher life.

A careful reading of either or both of these little books will amply repay the cost of time and money in the stimulus they will afford and the opportunity they will give for a re-adjustment and a new settlement of our plans of action.

Prince's *Courses and Methods* has been chosen—First. In the belief that to a great many teachers its outline of a regular, progressive, and symmetrical order of studies will be of great help. Much good teaching is rendered practically of little value for the lack of just such a basis as this book will furnish.

Second. Because its plans for the presentation of the various subjects of Reading, Spelling, Writing, Language, Grammar, Geography, Arithmetic, History, Physiology and Hygiene, Drawing, Singing, Observation Lessons, and Information Lessons are believed to be valuable both in themselves and as models for the teacher's use in other directions. It is essentially a "hand-book" for the school-room.

II. HISTORY.

F. W. TILTON, director.

Nowhere is systematic study more essential than in the department of history. Before attempting to recommend a course of reading and study for the next year, I have deemed it important to inquire what the work of the "Reading Circle" has been in this direction. I find that two years ago the members were advised to read Fisher's *Outlines of Universal History*, and suggestions of the greatest value were given by Professor Andrews as to the method and spirit in which the work should be done. I heartily recommend that these suggestions be again brought, in some convenient form, within reach of every member of the "Reading Circle." A year ago the same book was again recommended, with a suggestion that the members also follow a course of reading upon United States History.

These recommendations are in entire harmony with what I believe to be the true method of historical study: viz, to begin with a general view of the whole field of history, and then to pass on to more minute study of important periods. This method is adopted and carried out almost to perfection in the schools of Germany, and there is little doubt that it will become more prevalent in our own schools than it has been in the past. The medical student does not make a minute study of the heart before he has any idea of the structure of the body as a whole. Critical study of a brief epoch in the history of a single people, with no knowledge of earlier or contemporaneous events, is scarcely more sensible.

I deem it wise to read with great care a good summary of general history every year. An ordinary memory needs this amount of quickening to keep the cardinal events clearly defined. Something is to be gained, doubtless, by occasionally changing the book used for this purpose. Fresh interest is thus awakened, and the facts are presented to the mind in different lights. As special attention has been given to United States history the past year, it seems to me advisable to suggest that a reasonably full work upon English history be now mastered. I accordingly recommend the following courses for the ensuing year:

(A) GENERAL HISTORY.—A careful reading of one or more of the following, observing the suggestions of Professor Andrews regarding abstracts, etc.: Fisher's *Outlines of Universal History*; Miss Sheldon's *General History*; Myers' *Outlines of Ancient, Medieval, and Modern History*, 2 vols.; Freeman's *General Sketch of History*; *Outlines of the World's History*, by Swinton.

(B) ENGLISH HISTORY.—A similar reading of Green's *History of the English People*, 4 vols. Published at \$6; can be bought for about \$3.50.

III. LITERATURE.

ELIZABETH C. SHEPLEY, director.

1. Chaucer's *Prologue to the Canterbury Tales, with the Knight's Tale*. Clarendon Press edition. MacMillan, New York; 60 cents.

2. Mrs. Oliphant's *Makers of Florence*. MacMillan; \$2.25.

3. *Romola*, in any edition.

For any teachers who wish for text-books on English literature nothing can be better than those proposed in the first year of the Reading Circle: Stopford Brooke's *Primer* and Mrs. Oliphant's *Literary History of England*. Those who have read these, especially if they have added Taine's *English Literature*, and who wish for any advice in the selection of literature for delight and refreshment, are heartily recommended to the books I have named at the head of my paper. In the first and second they will find an agreeable introduction to the earliest great poet of the English language, and to the sources from which he largely drew his inspiration. In this connection they will readily be reminded to reread George Eliot's story of Florence, *Romola*.

IV. LANGUAGE.

T. WHITING BANCROFT, director.

I. *The Life and Growth of Language*, by Prof. W. D. Whitney, in the International Scientific Series, published by D. Appleton & Co., New York; 326 pages.

II. *The Philology of the English Tongue*, by Prof. John Earle. Oxford, at the Clarendon Press; 700 pages; \$1.75; third edition.

III. *The English Language*, by Prof. J. M. D. Meiklejohn. D. C. Heath & Co., Boston; 388 pages.

These works are suggested as a comprehensive course of reading on the subject of language.

The first is an outline of linguistic science, discussing such topics as how each individual acquires his language, change in the outer form of words, change in the inner content of words, loss of words and forms, production of new words and forms, the name-making process, Indo-European language, other families of language, nature and origin of language, and the science of language.

The second is an elementary philological treatise on the English language, embracing such subjects as a historic sketch of the rise and formation of the English language, the English alphabet, spelling, and pronunciation, the parts of speech, the verbal group, the noun group, the pronoun group, the link-word group, syntax, compounds, and prosody.

In a clear and lucid manner the author treats of the leading philological principles of the English language, so that the whole subject is presented in a most attractive light.

The third work recommended is just published. It is a condensed summary of the grammar, history, and literature of the English language. It is divided into four parts.

Part I is grammatical, considering such topics as etymology, syntax, analysis, word-building and derivation, word branching, etc.

Part II is rhetorical, presenting the subjects of composition, punctuation, figures of speech, paraphrasing, etc.

Part III is historical, with the following order of topics: The English language and the family to which it belongs, the periods of history of the English vocabulary, history of the grammar, specimens of English of different periods, modern English, and land-marks in the history of the English language.

Part IV contains a brief history of English literature with tables of English literature.

V. GEOGRAPHY.

CHARLOTTE E. DEMING, director.

The Earth as Modified by Human Action, by George P. Marsh, published by Charles Scribner's Sons. Price (edition of 1885), \$2.70.

This book is valuable for either consecutive or topical reading. The author was a wise observer of nature in both hemispheres, as well of her minutest as of her grandest operations, and his conclusions are those of a scholarly, practical man.

It is difficult to give an idea of the scope of the work by quoting a few of the subjects treated, but perhaps the following may be mentioned:

Natural advantages and physical decay of the Roman Empire, reaction of man on nature, human and brute action on nature compared, limits of human power, physical conservation and restoration, origin of domestic plants, vegetable power of accommodation, influence of animal life on vegetation, origin and transfer of domestic quadrupeds, introduction of fish, birds, and insects, utility and destruction of reptiles, marine and inland waters, sand dunes, projects of physical changes accomplished or proposed by man, as cutting marine isthmuses—Suez Canal, Cape Cod Canal, diversion of the Nile.

The author has treated in an interesting manner the subjects—trees and their influence, American and European forests and forestry.

In view of the increasing interest in trees and forests, owing to the observance of Arbor Day by our schools, it may not be out of place to call attention to Vol. 9 of the Tenth Census Report, which embodies the researches of Charles S. Sargent, professor of Arboriculture in Harvard University, and others, with relation to forest trees of North America. The bibliographical list which accompanies Mr. Marsh's book is excellent.

VI. SCIENCE.

GEORGE F. WESTON, director.

Natural science is especially useful in quickening the perceptive powers of pupils; and that teachers may be aided in this line we recommend the following guides for science teaching:

- I. About Pebbles. Prof. Alpheus Hyatt.
- II. Concerning a Few Common Plants. Prof. George Goodale.
- III. First Lessons in Natural History. Mrs. Elizabeth Agassiz.
- IV. Hydroids and Coral. Professor Hyatt.
- V. Commercial and other Sponges. Professor Hyatt.
- VI. First Lessons in Minerals. Miss E. H. Richards.
- VII. Common Minerals and Rocks. Prof. W. O. Crosby.

These little volumes are issued by Heath & Co., Boston, Mass.; Nos. 1, 2, and 6 costing 10 cents each, mailing price; No. 3, 25 cents; Nos. 4 and 5, 20 cents; No. 7, 25 cents.

SOUTH CAROLINA.

Mr. James H. Carlisle, of Spartansburg, to whom the Bureau was referred for information by the State superintendent, reports that the teachers' reading circle has not taken root in this State. Mr. Carlisle says:

"I am sorry that I can give no satisfactory account of the teachers' reading circles in our State. In some of our towns the teachers connected with our public schools are required to meet regularly and to pursue some course of reading. But I know of no regular Chautauqua teachers' circle in operation. There are several Chautauqua literary and scientific circles, but I know of no teachers' circle. The News and Courier of December 7, 1888, speaks of an attempt to organize such circles. I will write to parties mentioned in connection with the enterprise, and will take pleasure in giving you any information I may obtain."

As we have not heard from Mr. Carlisle we assume that his courteous efforts to obtain information for us have been unsuccessful.

TENNESSEE.

"The teachers' reading circle is dead in Tennessee," says State Superintendent Smith.

WEST VIRGINIA.

"It is not possible to give exact information in regard to the teachers' reading circle in West Virginia," says B. S. Morgan, State superintendent. "We have no State organization nor officer who has any record of work done in the State.

"I prepared a plan for the organization of circles by counties three years ago, and submitted it to the State Educational Association for its approval. The plan of organization and course of study were adopted, and since that time reading circles have been established in at least twenty-five counties. The work has met with the general approval of the teachers, and will prove an effectual organization in this State. I am now making arrangements to have a State organization established at next meeting of the State Educational Association, which will make the reading circle far more effective than it now is. I regret I cannot give you more information on this subject."

WISCONSIN.

"The history of the movement for teachers' reading circles in this State is not encouraging," says J. W. Stearns, professor of the science and art of teaching in the University of Wisconsin. "The organization was first effected in 1885, at the summer meeting of the Wisconsin Teachers' Association. The first board of directors was: J. W. Stearns, J. B. Thayer, Robert Graham, W. H. Beach, C. A. Hutchins, William Jones.

"This board organized by electing W. H. Beach chairman and J. W. Stearns secretary. An effort was made to interest the teachers at the fall institute, and a large number of county superintendents took hold of the work. Blanks for reporting were prepared and distributed, and circles organized in many parts of the State.

"The enrolment reached 1,506 members. Few reports were received of work done, and it soon became apparent that the real success of the movement depended upon the constant efforts of county superintendents, together with the ability of the circle teachers as organizers. The elections occurred in 1886, and these displaced from office a considerable number of superintendents who had been active in organizing and carrying on the work, and in almost every such case the work fell to the ground in the county. Others found that success required of them more labor than they could give in addition to the regular work of their office. Thus during the second year there was a great falling off in interest, and the enrolment did not reach above three hundred. The same persons were continued in the board, but the discouragement consequent on the year's experience prevented the inauguration of new efforts. There are now in the State a few circles, but no regular reports are made, and it is impossible to state numbers or work done."

CHAPTER XXII.

OBITUARY LIST OF NOTABLE EDUCATORS.

CONTENTS—Introduction—Number in the list—Other pursuits of the dead—Their ages at death—
American list—Foreign list.

The necrological list of one hundred and sixty-three names here presented is confined except in a few cases to the year that ended June 30, 1888. It comprises the names of such persons, American and foreign, whose deaths were noticed during the period in prominent journals, because they had had some real connection with education whether as teachers, writers, or benefactors.

The other pursuits with which their names were associated included astronomy, banking, botany, chemistry, commerce, engineering, geology, journalism, law, library work, literature, mathematics, medicine, mineralogy, music, paleontology, philology, philosophy, physics, political economy, sociology, surgery, teaching, theology, war, and zoölogy.

The American list comprises one hundred and ten names and the foreign list fifty-three; this difference is explained by the greater facilities existing for obtaining information about natives.

Their ages may be grouped by quinquennial periods as follows:

Number between ages mentioned.	Amer-ican.	For-eign.	Total.	Number between ages mentioned.	Amer-ican.	For-eign.	Total.
21-25.....	2	.....	2	66-70.....	13	10	23
26-30.....	1	1	2	71-75.....	13	2	15
31-35.....	2	.....	2	76-80.....	17	9	26
36-40.....	5	2	7	81-85.....	11	3	14
41-45.....	5	.....	5	86-90.....	4	5	9
46-50.....	5	4	9	Over 90.....	.....	1	1
51-55.....	9	4	13	All ages.....	110	53	163
56-60.....	8	6	14				
61-65.....	15	6	21				

The aggregate ages of the Americans was 6,759 years, or 64.65 years per capita; of the foreigners, 3,561 years, or 67.24 years per capita. The per capita for Americans and foreigners combined was almost exactly 65.5 years.

AMERICAN.

ABELL, Arunah S., in Baltimore, Md., April 19, 1888, aged eighty-one years; founder and principal owner of the Baltimore daily Sun newspaper; one of the associates of Prof. S. F. B. Morse in establishing the first telegraph lines in this country, etc.

AGNEW, Cornelius Rea, A. M., M. D., in New York City, April 14, 1888, aged fifty-seven years; educated at Columbia College and the College of Physicians and Surgeons, New York; clinical professor of eye and ear diseases in the latter; trustee of the city public schools, 1859; trustee of Columbia College, 1874; one of the founders of the U. S. Sanitary Commission, 1861; of the Union League Club of New York; an eminent surgeon in his special branches, and a Christian gentleman of the most lovely character.

ALCOTT, Amos Bronson, in Boston, Mass., March 4, 1888, aged eighty-eight years; widely known as a lecturer, essayist, philosopher, and mystic, and honored by the sincere regard of such men as Longfellow and Emerson.

ALCOTT, Miss Louise M., in Boston, Mass., March 6, 1888, aged fifty-five years; famous as a writer of charming books for young people, notable among which are *Little Women*, *Little Men*, *Eight Cousins*, etc.

- ANDREWS, the Rev. Israel W., A. M., D. D., LL.D., in Hartford, Conn., April 18, 1888, aged eighty-seven years; professor of moral philosophy in Marietta College, Ohio, 1835-85; president, 1855-85; vice-president and professor of political economy, 1885-88.
- ASTOR, Mrs. Charlotte Augusta [Gibbes], in New York City, December 12, 1887, aged sixty-two years; a most liberal giver to schools, hospitals, orphan asylums, and other charities.
- AVERY, John, A. M., LL.D., in North Bridgeton, Me., September 1, 1887, aged fifty years; professor of Greek in Bowdoin College; a noted Orientalist.
- BAIRD, Spencer Fullerton, A. M., LL.D., in Wood's Holl, Mass., August 19, 1887; born in Reading, Pa., February 3, 1823; educated at Dickinson College, Pa.; professor of chemistry and natural history in the same, 1845-50; assistant secretary of the Smithsonian Institution, Washington, D. C., 1850-78; secretary of the same, 1878-87; U. S. Commissioner of Fish and Fisheries, 1871-87; trustee of the Columbian University, and of the Corcoran Art Gallery; member of the National Academy of Sciences, 1864, and of numerous other societies, native and foreign. In all these relations, as in private life, Professor Baird proved himself to be one of the wisest, kindest, and most useful men of his day. His early reputation was gained as an ornithologist, but he became eminent for his knowledge in every department of natural history. The National Museum in Washington is a monument to his immense practical ability.
- BARNES, Alfred Smith, in Brooklyn, N. Y., February 17, 1888, aged seventy-one years, one of the most extensive school-book publishers in the world; noted for his Christian philanthropy.
- BATES, Joshua, A. M., LL.D., in Beverly, Mass., June 25, 1888, aged seventy-eight years; educated at Phillips Academy, Andover, and at Middlebury College, Vermont; head master of the Frothingham school, Charlestown, Mass., 1833, and of the Brimmer school, Boston, 1834-76; one of the founders of the Massachusetts Teachers' Association, 1845; a frequent and valuable contributor to the Massachusetts Teacher, etc.
- BERGH, Henry, in New York City, March 12, 1888, aged sixty-five years; a man of excellent education, cultured tastes, and independent fortune, he became famous for his energetic and unceasing labors for the prevention of cruelty to animals, the humane treatment of destitute and friendless children, the protection of game; he organized, and during life was the president of the New York "Society for the prevention of cruelty to animals," an organization that has been copied in every State and large city in this country, and in almost every nation of the civilized world.
- BITTINGER, William, in Abbottstown, Pa., March 3, 1888, aged sixty-seven years; a lifelong merchant, who left valuable legacies by his will to Pennsylvania College at Gettysburg, and to Lebanon Valley College, at Annville, for the endowment of professorships.
- BODLEY, Rachel L., M. D., in Philadelphia, June 15, 1888, aged sixty years; professor of chemistry and toxicology in the Woman's Medical College of Pennsylvania, 1865, and dean of the same, 1877, retaining both places till her death.
- BOOTH, James C., in West Haverford, Pa., March 21, 1888, aged seventy-seven years; an eminent analytical chemist; professor of practical chemistry in the Franklin Institute, Philadelphia, 1836-1844, and in the Philadelphia High School, 1842-45; State geologist of Delaware, 1837-38; melter and refiner in the Philadelphia mint, 1849-88.
- BOVEE, Martin H., in Whitewater, Wis., May 7, 1888, aged sixty-one years; founder of the State boys' reformatory at Waukesha; an ardent opponent of capital punishment.
- BREVOORT, James Carson, A. M., LL.D., in Brooklyn, N. Y., December 7, 1887, aged sixty-nine years; trustee of the Astor Library for more than a quarter century; member of the Brooklyn Board of Education; organizer and first president of the Long Island Historical Society; regent of the University of the State of New York, etc.
- BREWSTER, Henry, in New York City, September 19, 1887, aged sixty-three years; a well-known carriage-builder, whose firm established and maintained an admirable trade-school for the instruction of their employes.
- BROWN, the Right Rev. J. H. Hobart, A. M., S. T. D., at Fond du Lac, Wis., May 2, 1888, aged fifty-seven years; Protestant Episcopal Bishop of the diocese of Fond du Lac, and an indefatigable laborer in the educational affairs of his diocese.
- BULKLEY, John W., in Brooklyn, N. Y., June 19, 1888, aged eighty-five years; taught in Fairfield, Conn., several years, in Troy, N. Y., 1832-51, in Williamsburg, N. Y., 1851-55; assistant superintendent of Brooklyn public schools, 1855-85.
- BUNZL, Julius, in New York City, July 4, 1887, aged forty-nine years; a liberal giver to orphan asylums, hospitals, and schools.
- BURTON, the Rev. Nathaniel J., D. D., in Hartford, Conn., October 13, 1887, aged sixty-two years; a trustee of Yale College; Lyman Beecher lecturer on Preaching in the Yale theological school.
- CARNOCHAN, John M., M. D., in New York City, October 28, 1887, aged seventy years; educated in the University of Edinburgh and in the Paris *École de Médecine*; pro-

- fessor of surgery in the medical department of the University of the City of New York; author of standard surgical treatises, etc.
- CARPENTER, Wesley M., M. D., in New York City, January 7, 1888, aged fifty-five years; clinical professor of medicine in the medical department of the University of the City of New York; one of the editors of the N. Y. Medical Record.
- CHEEVER, Byron W., in Ann Arbor, Mich., March 6, 1888, aged, forty-six years; instructor in chemistry in the University of Michigan, 1873-81, and professor of metallurgy in the same, 1881-88.
- CLARK, Alonzo, A. M., M. D., LL.D., in New York City, September 13, 1887; born in Chester, Mass., March 1, 1807; educated at Williams College and at the College of Physicians and Surgeons in New York, after which he studied long in London and Paris; professor of chemistry in the medical school at Woodstock, Vt., 1840, and of pathology in the same, 1841; lecturer on physiology and pathology in the College of Physicians and Surgeons of New York, 1847; professor of pathology and the practice of medicine in the same, 1855-82; president of the same, 1875-84; probably the most eminent medical instructor of his day, and a consulting physician of great reputation.
- CLARK, Alvan, in Cambridge, Mass., August 19, 1887, aged eighty-three years; a painter and industrial designer, he became at forty-two a maker of telescopes; the lenses in the great telescopes of the Dearborn Observatory, Chicago, the Naval Observatory, Washington, the Observatory of the University of Virginia, the Russian Observatory at Pultowa, the Lick Observatory in California, and many others were produced by this house. The lenses mentioned were, respectively, 18½, 26, 26, 30, and 36 inches in diameter, each being for the time the largest ever successfully finished.
- CLARKE, the Rev. James Freeman, D. D., in Jamaica Plain, Boston, Mass., June 8, 1888, aged seventy-eight years; an overseer of Harvard College, 1866-88; professor of natural theology and Christian doctrine in Harvard Divinity School, 1867-71; author of Ten Great Religions and many other works of liberal theology.
- COGSWELL, the Rev. Elliot C., at Rye Beach, N. H., August 31, 1887, aged seventy-three years; long time principal of Coe Academy, Northwood, N. H.
- CORCORAN, William Wilson, in Washington, D. C., February 24, 1888, aged eighty-nine years; an eminent banker, founder and endower of the "Corcoran Gallery of Art" and of the "Louise Home" for poor gentlewomen; endower of the National Medical College and of the Corcoran Scientific School of Columbian University, etc.
- CORNELL, John B., in Lakewood, N. J., October 26, 1887, aged sixty-six years; a well-known iron manufacturer and a liberal giver to many charitable, religious, and educational objects; trustee of Drew Theological Seminary, etc.
- CROUSE, David L., A. M., in New Market, Va., June 14, 1888, aged nearly thirty-five years; a graduate of North Carolina College, tutor in the same and principal of several schools in North Carolina till made professor of languages in the Polytechnic Institute, New Market, 1887-88.
- CURRY, the Rev. Daniel, D. D., in New York City, August 17, 1887, aged seventy-seven years; formerly principal of Troy Conference Academy, and, later, president of Indiana Wesleyan University; from 1864 editor of the Christian Advocate, the chief Methodist journal.
- DACEY, Timothy J., LL. B., in Boston, Mass., December 15, 1887, aged thirty-eight years; educated in the public schools of Boston, in Holy Cross College, Worcester, and in Harvard Law School; assistant Commonwealth's attorney for Suffolk County, Massachusetts, 1877-87; president of the trustees of the Boston City Hospital and president of the Boston public school committee; a man of lovable character, industrious habits, and refined tastes.
- DAVIDSON, Augustus R., M. D., in Buffalo, N. Y., May 25, 1888, aged forty-three years; professor of medical chemistry, toxicology, and dermatology in the medical department of Niagara University.
- DAVIS, Edwin H., M. D., in New York, April 20, 1888, aged seventy-seven years; an archaeologist associated with E. G. Squier in the authorship of Ancient Monuments of the Mississippi Valley; professor of materia medica and therapeutics in the New York Medical College, 1850-59.
- DAWSON, Benjamin Frederick, M. D., in New York City, April 3, 1888, aged forty-four years; professor of gynecology in the New York Post Graduate Medical School.
- DE SCHWEINITZ, the Rt. Rev. Edmund, D. D., LL. D., in Bethlehem, Pa., December 18, 1887, aged sixty-two years; senior bishop of the Moravian Brethren in America, professor in the Moravian Theological School, a well-known writer on Moravian church history, etc.
- DINWIDDIE, Hardaway H., A. M., in College Station, Texas, December 11, 1887, aged forty-three years; a graduate of Virginia Military Institute, 1867; instructor in the Texas Military Institute, 1869-79; professor of chemistry, 1879-87, and chairman of the faculty, 1883-87, in the Agricultural and Mechanical College of Texas; a man of

- singular purity, energy, and devotion to duty, and his death a serious loss to education in that State.
- DIX, Miss Dorothea L., in Trenton, N. J., July 19, 1857, aged eighty-two years; being independent in her circumstances, she devoted more than fifty years of her long life to ameliorating the condition and treatment of prisoners, paupers, the insane, etc., from 1861 to 1865 supervising nurse U. S. Army.
- DOUAI, Carl Daniel Adolf, Ph. D., in Brooklyn, N. Y., January 21, 1828, aged about sixty-eight years; a German by birth, educated at Dorpat and Leipzig, a private tutor in Russia, and a teacher in Germany until 1844, when he arrived in Texas; he edited a newspaper in San Antonio, 1846-53; taught German in Philadelphia and Boston, 1854-59, and subsequently established kindergartens and schools in Hoboken and Newark, N. J., 1859-76; after this time he became again a journalist, writing much for educational periodicals; he was an ardent advocate of the kindergarten and of other German pedagogical ideas; wrote a manual for the Kindergarten, a series of Rational Readers, and an illustrated German primer.
- DRAKE, T. R. S., M. D., in New York City, March 11, 1888, aged forty-three years; professor of clinical medicine in the medical department of the University of the City of New York.
- DREXEL, Joseph W., in New York City, March 24, 1834, aged fifty-five years; a well-known banker, much interested in educational and benevolent enterprises; connected with the New York Academy of Natural Sciences, the Metropolitan Museum of Art, the New York Geographical Society, the New York Historical Society, the New York Sanitary Society, the Society for Improving the Condition of the Poor, etc.
- DUGGAN, James R., A. M., M. D., Ph. D., at Wake Forest College, North Carolina, January 8, 1888, aged thirty years; professor of chemistry 1866-88.
- DUNLAP, the Rt. Rev. George K., S. T. D., at Las Cruces, New Mexico, March 12, 1888, aged fifty-seven years; missionary bishop of the Protestant Episcopal Church for the diocese of Arizona and New Mexico since 1880; an energetic laborer in behalf of Christian education.
- DUNSTER, Edward S., M. D., in Ann Arbor, Mich., May 3, 1833, aged fifty-four years; professor of obstetrics successively in the medical schools of the University of Vermont and of Dartmouth College, in the Long Island Medical College Hospital, and in the University of Michigan.
- ELLIOTT, Ebenezer B., in Washington, D. C., May 24, 1833, aged sixty-four years; actuary of the U. S. Sanitary Commission 1861-65; chief clerk of the Bureau of Statistics and actuary of the Treasury Department 1867-1888; long and prominently identified with the reform of the civil service and with the application of competitive examinations as a test of fitness for appointments therein; member of the Philosophical Society of Washington; an authority in vital statistics, and in coinage, weights and measures, and an acceptable writer on those subjects for encyclopedias, etc.
- ELLIOTT, the Rt. Rev. Robert W. B., D. D., in Sewanee, Tenn., August 26, 1887, aged forty-seven years; bishop of the Protestant Episcopal Church for Western Texas, and an energetic promoter of schools and colleges.
- FAIRBANKS, Horace, in New York City, March 17, 1888, aged sixty-eight years; one of the well-known firm of weighing-scales makers, and a generous giver to libraries, schools, and charities.
- FALK, the Rev. F. A. W., Ph. D., in Racine, Wis., December 1, 1837, aged seventy-two years; professor of ancient languages in St. James College, Maryland, 1852-61, and of modern languages in Franklin and Marshall College, Pennsylvania, 1861-67, and in Racine College, 1867-87.
- FICKLIN, Joseph, Ph. D., in Columbia, Mo., September 6, 1837, aged fifty-four years; professor of mathematics in the University of Missouri 1865-87; author of a Complete Algebra, etc.
- GAY, Sidney Howard, in Staten Island, New York, June 25, 1838, aged seventy-four years; a well-known journalist, and author of an excellent History of the United States.
- GILBERT, John W., in Tuscaloosa, Ala., August, 1887, aged twenty-four years; assistant professor of the English language and literature in the University of Alabama, 1885-87.
- GILMORE, Quincy A., in Brooklyn, N. Y., April 7, 1838, aged sixty-two years; graduated from the Military Academy, 1849; instructor of military engineering in the same, 1852-56; served with eminent ability as engineer in the Federal Army during the Civil War; brevet major-general U. S. Army, author of standard works on Limes, Hydraulic Cements, and Mortars, and on Roads, etc.
- GOLDSMITH, Middleton, A. M., M. D., in Rutland, Vt., November 26, 1837, aged sixty-nine years; professor of surgery in Castleton Medical School, 1844-55, and in Kentucky School of Medicine, 1856-61; brigade surgeon in the Federal Army, 1861-65; a character of singular charity, originality, and boldness.

- GOOD, the Rev. Jeremiah H., D. D., in Tiffin, Ohio, January 25, 1883, aged sixty-five years; president of the Heidelberg Theological Seminary, and sometime professor of mathematics in Heidelberg College.
- GRAY, Asa, M. D., LL. D., in Cambridge, Mass., January 30, 1883, aged seventy-seven years; born in Paris, N. Y., November 18, 1810; graduated in the Fairfield Medical School, 1831; professor of natural history in Harvard University, 1842, remaining in connection therewith till his death; probably the most eminent botanist of the century; author of numerous botanical works, memoirs, etc., among which should be remembered *Elements of Botany*, 1836; *Botanical Text-book*, 1842; *How Plants Grow*, 1853; *How Plants Behave*, 1875; *Manual of the Botany of the Northern United States*, 1848; *Synoptical Flora of North America*, etc.
- GUNN, Moses, M. D., in Chicago, Ill., November 4, 1887, aged sixty-five years; professor of surgery in the University of Michigan, 18—, and in Rush Medical College, Chicago, 1866-87; medical director in the Federal Army, 1861-65, etc.
- HACKL, Joseph E., M. D., in Toledo, Ohio, April 24, 1888, aged forty years; well-known physiologist.
- HAGUE, the Rev. William, D. D., in Boston, Mass., August 1, 1887, aged seventy-nine years; a trustee of Brown University, Rhode Island; Columbian University, District of Columbia, and Vassar College, New York, and a Baptist clergyman of note.
- HARDY, Alpheus, in Boston, Mass., August 7, 1887, aged seventy-nine years; trustee for twenty-two years of Amherst College, Massachusetts, and for twenty-seven years of Andover Theological Seminary; a well-known merchant and philanthropist.
- HARGER, Oscar, A. M., in New Haven, Conn., November 6, 1887, aged forty-four years; assistant professor of paleontology in Yale University.
- HARRINGTON, Rev. Henry F., in Keene, N. H., September 19, 1887, aged seventy-three years; educated at Phillips Exeter Academy and Harvard College; usher in the Boston English High School, 1835-40; member of school committee in Lawrence, Mass., 1849-53, and in Cambridge, Mass., 1854-64; superintendent of public schools New Bedford, Mass., 1864-87; author of a teacher's manual, an elementary speller, a primary geography, and of a remarkably able series of annual school reports; one of the wisest, kindest, and most lovable of men.
- HARRIS, Rev. William L., D. D., LL. D., in New York, September 2, 1887, aged seventy years; tutor in Ohio Wesleyan University, 1845; principal of Baldwin Institute (now University), 1848; professor in Ohio Wesleyan University, 1852-60; a noted clergyman and bishop of the Methodist Episcopal denomination.
- HASSARD, John R. G., in New York, April 18, 1883, aged fifty-one years; a well-known journalist and musical critic; author of a school history of the United States.
- HAYDEN, Ferdinand V., A. M., M. D., LL. D., in Philadelphia, December 22, 1887, aged fifty-eight years; professor of geology and mineralogy in the University of Pennsylvania, 1865-72; one of the ablest, most industrious, and worst-abused of scientific explorers in the Territories; a man of rare energy, modesty, and unselfishness.
- HEILPRIN, Michael, in New York, May 10, 1888, aged sixty-five years; one of the principal contributors to Appleton's *American Cyclopedias*, the *New York Nation*, etc.
- HICKOCK, Rev. Laurens Perseus, D. D., at Amherst, Mass., May 6, 1888, aged eighty-nine years; born in Bethel, Conn., 1798, graduated from Union College, 1820, taught in Western Reserve College, 1836-44, and in Auburn Theological Seminary, 1844-52; at Union College, as professor of mental and moral science, 1852-66, and as president, 1866-68; author of valuable works on moral philosophy, on rational psychology, on rational cosmology, on moral science, on the Creator and the creation, etc.
- HOLDER, Joseph B., M. D., in New York, February 28, 1888, aged sixty-four years; curator of invertebrate zoölogy in the American Museum of Natural History; author of *Fauna Americana*, etc.
- HOMES, Henry Augustus, LL. D., in Albany, N. Y., November 3, 1887, aged seventy-seven years; in the State Library as assistant, 1854-62, and as principal librarian, 1862-57; a noted Oriental scholar.
- HOWARD, Flodoardo, M. D., in Rockville, Md., January 17, 1888, aged seventy-six years; professor of obstetrics and gynecology in the medical department of Georgetown University.
- HUTCHINSON, Joseph C., M. D., LL. D., in Brooklyn, July 17, 1887, aged sixty years; professor of surgery in the Long Island College Hospital, 1860-67; health officer of Brooklyn, 1873-76, etc.
- HYDE, Frederick, M. D., in Cortland, N. Y., October 15, 1887, aged seventy years; professor of surgery in the medical department of Syracuse University; president of the trustees of Cortland State Normal School; trustee of the Franklin-Hatch Library, etc.
- JARVES, James Jackson, in Tarasp, Switzerland, June 23, 1883, aged seventy years; author of *Art Hints*, 1845; *The Art Idea: sculpture, painting, and architecture in America*, 1865; *Confessions of an Inquirer*, 1857-69; *Art Thoughts*, 1869; most

- of his collection of early Italian paintings are now in the Yale School of Fine Arts; his collection of Etruscan sarcophagi is in the Boston Museum of Fine Arts; his admirable specimens of old Venetian glassware now belong to the Metropolitan Art Museum of New York, and another collection of pictures and sculptures, brought together by his taste, is now in the Art Museum of Cleveland, Ohio; with very moderate means he was a life-long student and collector, and confessedly the chief of American art critics and writers.
- JOHANNOT, James, LL. D., at Tarpon Springs, Fla., June 18, 1888, aged about sixty-five years; a teacher, educational writer, and conductor of teachers' institutes for nearly half a century.
- KEMEN, Mary Josephine, "Mother Emilie," in Lockport, N. Y., July 20, 1887; aged about sixty-three years; superior of the Order of "Sisters of St. Mary" in America, 1863-87; foundress of thirteen convent schools, etc.
- LAMY, the Most Rev. John B., Roman Catholic archbishop of Santa Fé, in Santa Fé, N. Mex., February 13, 1888; aged seventy-four years; an eminent promoter of secondary and superior Catholic schools.
- LEAVENWORTH, Elias W., LL. D., in Syracuse, N. Y., November 25, 1887, aged eighty-four years; regent of the University of the State of New York, etc.
- LINCOLN, the Rev. Heman, D. D., at Newton, Mass., October 19, 1887, aged sixty-six years; professor of Ecclesiastical History in Newton Theological Institution.
- LINSLEY, Jared, A. M., M. D., in Northford, Conn., July 12, 1887, aged eighty-three years; for many years a trustee of the College of Physicians and Surgeons of New York City; a liberal giver to the library-fund of Yale University, etc.
- LOZIER, Mrs. Clemence H. S., M. D., in New York City, April 26, 1888, aged seventy-four years; dean of the Homoeopathic Womans' Medical College of New York, 1863-88.
- MCCARTY, Hugh De France, in Highland, Kans., September 12, 1887, aged fifty-seven years; superintendent of Leavenworth County public schools, 1868-69; State superintendent of public instruction in Kansas, 1870-74; professor of mathematics in Highland University, 1879-87.
- MELL, Rev. Patrick Hughes, D. D., in Athens, Ga., January 26, 1888, aged nearly seventy-four years; educated at Darien Academy, Georgia, and Amherst College, Massachusetts; professor in Mercer University, 1842-55; in the University of Georgia, 1856-60; president, 1860, and chancellor, 1878, of the same until his death; for many years president of the Southern Baptist Association, etc.
- MEMMINGER, Charles G., in Charleston, S. C., March 7, 1888, aged eighty-four years; honorably associated with the sustentation of specie payments by the State banks in 1836-37, and with the reform of the State school system, 1854; though opposing Mr. Calhoun's nullification ideas in 1832, he adhered to the fortunes of his State after its secession from the Union in 1860, and served as secretary of the Confederate treasury from 1861 to 1864.
- MEYROWITZ, Alexander, M. A., in New York, August 18, 1887, aged seventy-three years; professor of Hebrew and of Semitic literature in the University of the City of New York, 1873, and in the University of the State of Missouri, 1876.
- MILLER, Akin C., M. D., in Cleveland, Ohio, June 21, 1887, aged nearly fifty-five years; professor of gynecology in the medical department of the University of Wooster.
- MORRIS, P. Pemberton, LL. D., in Philadelphia, March 1, 1888, aged seventy years; professor of practice, pleading, and evidence in the law school of the University of Pennsylvania, 1863-83.
- ORE, Gustavus J., A. M., LL. D., in Atlanta, Ga., December 11, 1887, aged sixty-eight years; professor of mathematics in Emory College, 1856-72; State school commissioner, 1872-87; energetic, yet judicious; liberal and genial, but sternly honest. He revived the public school system of the State from the low condition into which it had fallen from previous mismanagement and dishonesty, and left it upon his death firmly established in the affections of his fellow-citizens, his own best monument as a public servant.
- PALMER, Alonzo B., A. M., M. D., LL. D., in Ann Arbor, Mich., December 23, 1887, aged seventy-two years; professor in the University of Michigan for thirty-five years—of anatomy, 1852-54; of materia medica and therapeutics, 1854-60; of the practice of medicine, 1860-87; author of an excellent treatise on the Practice of Medicine, etc.
- PARKER, Peter, A. M., M. D., in Washington, D. C., January 10, 1888, aged eighty-three years; a regent of the Smithsonian Institution, trustee of the Corcoran Art Gallery, etc.
- PAUL, Edward A., A. M., in Washington, D. C., April 2, 1888, aged thirty-three years; principal of the City High School, 1878-88, which owes much of its success to his energy, modesty, and candor.
- PORTER, Mrs. Eliza Chappell, in Santa Barbara, Cal., in December, 1887, aged about seventy-five years; she opened a school in a log-house, immediately outside of Fort Dearborn, Illinois, in June, 1833, and thus became the earliest teacher of the now great city of Chicago.

- PORTER, Rev. James, D. D., in Brooklyn, N. Y., April 16, 1888, aged eighty years; overseer of Harvard College, 1852-55; trustee of Wesleyan University, 1855-71.
- PRESCOTT, Miss Mary N., in Deer Island, near Newburyport, Mass., June 14, 1888, aged forty-eight years; author of many stories, etc., for the young.
- RANDOLPH, N. A., M. D., in Atlantic City, N. J., August 21, 1887, aged thirty-eight years; professor of physiology in the University of Pennsylvania.
- RAVENEL, Henry W., LL. D., in Aiken, S. C., July 17, 1887, aged seventy-two years; eminent as a botanist and an acknowledged authority upon cryptogamous and phenogamous plants; a man who devoted his whole life and a large fortune to the increase and diffusion of scientific knowledge among men, yet of great modesty and self-restraint.
- ROBERTSON, William S., M. D., in Muscatine, Iowa, January 20, 1887, aged fifty-five years; professor of the theory and practice of medicine in the Iowa State University; president of the Iowa State Board of Health and of the State Board of Medical Examiners; colonel of volunteers in the Federal army during the War of 1861-65; member of many medical societies; one of the founders of the Glenwood Home for children of feeble mind; a man admirable in every relation of life.
- ROOT, Rev. Eleazer, A. M., M. D., in St. Augustine, Fla., July 25, 1887, aged eighty-five years; born in Canaan, N. Y., March 6, 1802; graduated from Williams College, 1821; tutor in same, 1822; taught in the South from 1830 to 1845; founder and first president of Carroll College, Wisconsin, 1846-48; was a prominent advocate of public schools in the Wisconsin constitutional convention of 1847, and author of the act establishing the same; first State superintendent of public instruction by unanimous election, 1849-52; superintendent of Fond du Lac County schools, 1852-53; a regent of the University of Wisconsin, 1848-53, and one of the founders and promoters of the Wisconsin Historical Society; became an Episcopal clergyman, and was rector of Trinity Church, in St. Augustine, Fla., 1874-84; a man of life-long labor and usefulness.
- ROOTS, Benajah G., in Tamaroa, Ill., May 9, 1888, aged seventy-seven years; long a teacher in New York and Illinois; for many years county superintendent of public schools; a member of the Illinois State board of education from its foundation; some time superintendent of schools in Fort Smith, Ark.; a great organizer and conductor of teachers' institutes, and a tireless advocate of normal schools; known everywhere in Illinois as "Father Roots."
- SALYARDS, Joseph, A. M., in New Market, Va., August 10, 1885, aged seventy-six years; born 1808; was mainly self-educated, but became wonderfully learned in English, French, German, Italian; Spanish, Latin, Greek, Hebrew, mathematics, and physics; taught for fifty-six years, of which forty were spent as principal of New Market Academy and of the Polytechnic Institute; he was also a poet of no mean ability; edited several works for the Lutheran denomination, with which he was connected, and did much other literary and editorial work.
- SCHULTZ, Elwood A., B. S., in Phillipsburg, N. J., March 23, 1888, aged twenty-three years; tutor in chemistry in Lafayette College, Pennsylvania.
- SCOFIELD, George S., at Clifton, N. Y., December 28, 1887, aged seventy-seven years; agent of the American Sunday School Union, 1826-87; editor of the Ten-Dollar Library and of the Union Questions; millions of copies of both have been sold.
- SQUIER, Ephraim George, in Brooklyn, April 17, 1888, aged sixty-six years; in early manhood a teacher, journalist, and engineer; famous as an archæologist; in conjunction with E. H. Davis, author of Ancient Monuments of the Mississippi Valley, 1848, and as sole author Aboriginal Monuments of the State of New York, 1851; Nicaragua, its People, Scenery, and Monuments, 1852; Notes on Central America, 1854; The States of Central America, 1857; Honduras, 1870; Peru, 1876; and numerous other works, pamphlets, and articles.
- STONE, Rev. James, A. B., D. D., in Detroit, Mich., May 19, 1888, aged seventy-seven years; president Kalamazoo College, 1845-65.
- STURGIS, John H., at St. Leonard's-on-Sea, England, February, 1888, aged fifty-three years; architect of the buildings for the Boston Museum of Fine Arts, and of the Boston Y. M. C. A., etc.; introducer of terra-cotta as an architectural decoration in this country.
- TARBOX, Rev. Increase N., D. D., in Newton, Mass., May 3, 1888, aged seventy-three years; long the secretary of the American Educational Society.
- VANDERPOEL, Aaron J., LL. D., in Paris, France, August 22, 1887, aged sixty-two years; professor in the law school of the University of the City of New York, etc.
- VODGES, Edward W., in Philadelphia, October 18, 1887, aged fifty-seven years; a teacher in the City High School since 1848.
- WARREN, Wilmot L., A. M., in Springfield, Mass., December 23, 1887, aged forty years; a graduate and trustee of Tuft's College, Massachusetts; editorial contributor to the Springfield Republican for twenty years.

- WEBB, George J., in Orange, N. J., October 6, 1857, aged eighty-four years; long a teacher of music in Boston; compiler of several excellent hymnals and a composer of much sacred music.
- WEISSE, John Adam, in New York City, January 12, 1834, aged seventy-seven years; professor of French in the Imperial School, Vienna, Austria; instructor in French for eight years in Boston; author of *A Key to the French Language* (1842), the *Origin, Progress, and Destiny of the English Language and Literature* (1876), etc.
- WHEELER, John H., A. M., Ph. D., at Newbury, Vt., October 10, 1837, aged thirty-six years; professor of Latin in Bowdoin College, Maine, 1861, and of Greek in the University of Virginia, 1862-87; one of the most promising of American philologists, whose death is a serious loss to solid scholarship.
- WIMMER, Very Rev. Boniface, O. S. B., at Beatty, Pa., December 8, 1837, aged about eighty-two years; founder of the Benedictine Order in this country, and a vigorous promoter of the many colleges and schools conducted thereby.

FOREIGN.

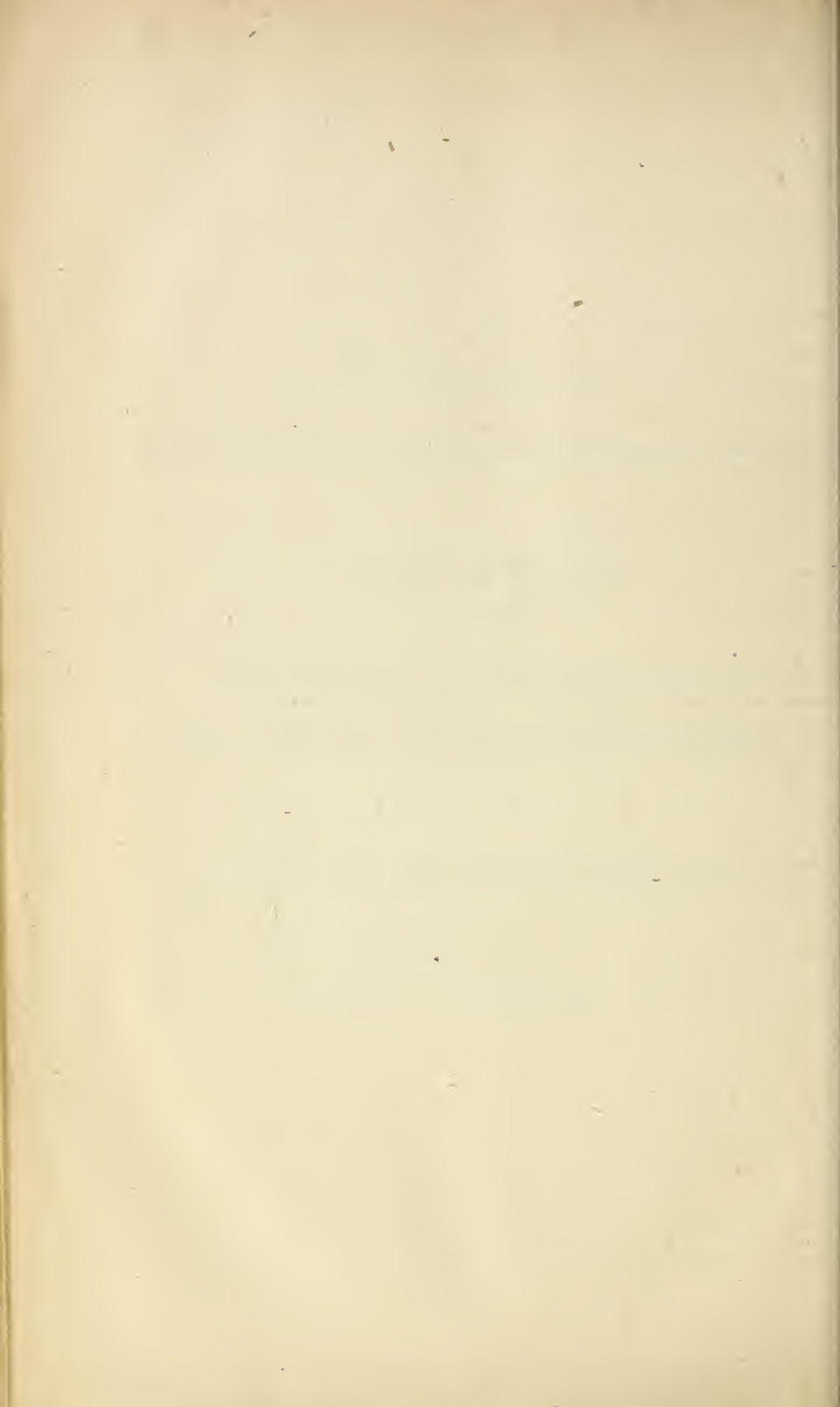
- ARNOLD, Matthew, M. D., D. C. L., in Liverpool, England, April 15, 1833, aged sixty-five years; oldest son of the famous "Arnold of Rugby;" inspector of schools for the Science and Art Department of the Committee of Council on Education in England, 1854-86; professor of poetry in the University of Oxford, 1876-86; author of *Culture and Anarchy*, *Literature and Dogma*, etc.; one of the ablest poets and critics of modern days.
- BALTZER, Dr. R., at Giessen, Germany, November 7, 1837, aged sixty-nine years; professor of mathematics in the University of Giessen.
- BLOXAM, Charles L., in London, England, November 29, 1837, aged fifty-five years; professor of chemistry in King's College.
- BOGDANOFF, M. N., Ph. D., in St. Petersburg, Russia, March 16, 1838, aged forty-eight years; professor of ornithology in the university and a well-known writer on Russian zoölogy.
- BOUCICANT, Mme. —, in Paris, France, March, 1838, aged seventy years; proprietor for fifty years of the famous "Bon Marché;" a life-long giver to schools, hospitals, and charities.
- BURROWS, Sir George, Bart., M. D., LL. D., D. C. L., in London, England, December, — 1867, aged eighty-six years; lecturer on medical jurisprudence and professor of medicine in St. Bartholomew's Hospital, London; president of the British Medical Association, 1862, and president of the Royal College of Physicians, 1871-74; physician to the Queen, 1873, etc.
- CIPARIN, Timoteo, in Bucharest, Roumania, September 14, 1837, aged eighty-two years; a noted professor, editor, and author of books on Roumanian philology, etc.
- CARO, Elme Marie, in Paris, France, July 13, 1837, aged sixty-one years; professor of philosophy in the Paris faculty of letters; member of the Academy, etc.
- CRAIK, Mrs. Dinah Maria [Muloch], in Shortlands, Kent, England, October 12, 1837, aged sixty-one years; author of *John Halifax, Gentleman* and many other charming stories.
- DE BARY, Anton, in Strassburg, Germany, January 19, 1838, aged fifty-seven years; professor of botany at the Universities of Freiburg, Halle, and Strassburg; specially noted for his researches and publications respecting fungi, bacteria, etc.
- DE CHAUMONT, F. S. B. F., F. R. S., surgeon-major in the British army, in Southampton, England, April 18, 1838, aged fifty-five years; professor of military hygiene in the Army Medical School at Netley.
- DICKSON, Alexander, M. A., M. D., LL. D., at Hartree House, Lanarkshire, Scotland, December 30, 1837, aged fifty-one years; professor of botany in the University of Dublin, 1866; in the Royal College of Science of Ireland, 1867; in the University of Glasgow, 1868-79; in the University of Edinburgh, 1879-87; a copious writer on botanical subjects.
- FECHNER, Gustav Theodor, at Leipzig, Germany, November 18, 1837, aged eighty-six years; professor of experimental physics in the University of Leipzig; virtual creator of the subject of psychophysics, on which he wrote copiously.
- FARRE, Arthur, M. D., F. R. S., in London, England, December 17, 1837, aged seventy-six years; an eminent vital statistician, etc.
- FLEISCHER, Dr. Heinrich Leberecht, in Leipzig, Germany, February 10, 1838, aged eighty-six years; professor of Arabic in the university at that place.
- GIBSON, Miss Jane, in Glasgow, Scotland, December —, 1837, aged 102 years; founder of the Gibson bursaries in the University of Glasgow, and a life-long power for learning and religion in her native city.

- GOLDSCHMIDT, Madame Jenny Lind, in Malvern, England, November 2, 1837, aged sixty-six years; a pupil of the famous music teacher, Manuel Garcia; world-famous as "The Swedish Nightingale," her voice being a soprano of wonderful sweetness, flexibility, and expressive power; for the last thirty years of her life a teacher of music in London.
- GORDON, Alexander, M. R. C. S. I., in Belfast, Ireland, July 28, 1837, aged sixty-nine years; professor of surgery in Queen's College, Belfast, for thirty-eight years.
- HAIRION, Frédéric, M. D., in Louvain, Belgium, August 14, 1837, aged eighty years; formerly professor in the medical faculty of the Catholic University of Louvain, president of the Belgian Royal Academy of Medicine, commander of the Order of Leopold, etc.
- HARNACK, Axel, Ph. D., in Dresden, Germany, January —, 1833, aged thirty-nine years; professor of mathematics in the Royal Polytechnic School at Dresden.
- HOWITT, Mrs. Mary [Botham], in Rome, Italy, February 2, 1838, aged eighty-four years; author of many volumes in verse and prose for the young.
- HUNT, Robert, F. R. S., in London, England, October 17, 1837, aged eighty years; formerly professor of mechanical science in the Royal School of Mines.
- JELLETT, The Rev. John Hewitt, M. A., D. D., D. C. L., in Dublin, Ireland, February 19, 1838, aged seventy years; fellow of Trinity College, Dublin, 1840; professor of physics, 1848; provost, 1831; one of the commissioners of national education for Ireland, 1863; author of several able mathematical works.
- KAHNIS, Karl Friedrich August, in Leipzig, Germany, June 20, 1833, aged seventy-three years; privat docent in the University of Berlin, 1842-44; professor extraordinary in the University of Breslau, 1844-50, and professor in the theological faculty of the University of Leipzig, 1850-83; a well-known writer of Lutheran theological treatises.
- KEY, Admiral Sir Astley Cooper, in ———, England, March 3, 1838, aged seventy-five years; director of the Royal Naval College, which he greatly improved.
- KIRCHOFF, Gustav Robert, in Berlin, Germany, October 17, 1837; born in Königsberg March 12, 1824; educated at the Königsberg University; privat docent in the University of Berlin, 1848-50; professor extraordinary of experimental physics at Breslau, 1850-54; professor of physics at Heidelberg, 1854-74, and the same at Berlin, 1874-87; his discovery, in 1859, of spectrum-analysis made him famous; author of many valuable papers on magnetism, electricity, heat, etc.
- KOSTELETSKY, Dr. Vincent, at Prague, Hungary, August 19, 1837, aged eighty-seven years; sometime professor in the University, and later director of the Botanical Garden.
- LANGER, von Edenberg Karl, M. D., in Vienna, Austria, December 8, 1837, aged sixty-eight years; chevalier of the Austrian order of Leopold; professor of anatomy in the Universities of Buda-Pesth and Vienna, and rector of the latter in 1875-76; author of a Manual of Anatomy, etc.
- LEMAIRE, Pierre Auguste, at Briancourt, France, December 17, 1837, aged eighty-five years; professor of rhetoric in the College of Louis le Grand, Paris; editor of Lucan, Terence, Lucretius, etc.
- LEVI, Professor Leone, in London, England, May 8, 1838, aged sixty-seven years; a well-known author and teacher of political economy.
- LINDNER, Gustav Adolf, Ph. D., in Prague, Austria, October 16, 1837, aged fifty-nine years; professor of philology and pedagogics in the University of Prague.
- LUTHER, Dr. E., in Königsberg, Germany—October, 1837, aged seventy years; professor of astronomy in the University.
- MAINE, Sir Henry James Sumner, M. A., LL. D., K. C. S. I., F. R. S., at Cannes, France, February 3, 1838, aged sixty-five years; regius professor of civil law in the University of Cambridge, 1847-54; reader on jurisprudence in the Middle Temple, London, 1854-62; corpus professor of jurisprudence in the University of Oxford, 1870-83; author of Ancient Law, Village Communities in the East and West, Lectures on the Early History of Institutions, etc.; the first English writer who applied to law and sociology the rigid methods of modern science; he clothed his researches and results in language of singular vigor, lucidity, and grace.
- MANGON, Hervé, in Paris, France, May 15, 1838, aged sixty-six years; professor of engineering in the École des Ponts et Chaussées in the Conservatoire des Arts et Métiers, and in the Institut National; a life-long student of science as applicable to agriculture; Minister of Agriculture in the Brisson cabinet.
- NEUMANN, Spallart, F. X., in Vienna, April 19, 1833, aged fifty-one years; professor of political economy in the University of Vienna, member of the Imperial (Aulic) Council, and Vice-President of the International Statistical Institute.
- PANSCH, Dr. Adolf, in Kiel, Germany, August 14, 1837, aged forty-six years; professor extraordinary of anatomy in the University of Kiel.

- PRICE, Bonamy, M. A., LL. D., in London, England, January 9, 1888, aged seventy-nine years; professor of political economy in the University of Oxford for more than twenty years; author of *The Principles of Currency, Currency and Banking, Practical Political Economy*, etc.
- QUAIN, Richard, F. R. C. S. and F. R. S., in London, England, September 15, 1887, aged eighty-seven years; author of *The Anatomy of the Arteries*, and one of the authors of *Sharpey & Quain's Anatomy*; emeritus professor of surgery in University College; formerly president of the Royal College of Surgeons, etc.
- QUESTEL, Charles August, in Paris, France, in May, 1888, aged eighty years; educated in the *Ecole des Beaux Arts*, in which he afterward became professor of architecture; member of the Fine Arts section in the Institute of France; president of the Central Society of French Architects, etc.
- SCHJELLERUP, Hans C. F. C., in Copenhagen, Denmark, November 13, 1887, aged sixty years; professor in the Danish Naval Academy and in the Copenhagen Polytechnic School; a well-known astronomer.
- SCHUSTER, Dr. Max, in Vienna, Austria, November —, 1887, aged thirty years; assistant professor of mineralogy in the University of Vienna.
- SCOTT, The Rev. Robert, D. D., in Oxford, England, December 3, 1887, aged seventy-six years; master of Balliol College, Oxford; one of the authors of *Liddell and Scott's Greek-English Lexicon*.
- STEWART, Balfour, F. R. S., in Balrath, Ireland, December 18, 1887, aged fifty-nine years; director of the Kew Observatory, 1859-70; professor of physics in Owens College, 1870-87; author of *Elementary Physics, Conservation of Energy*, and other valuable writings.
- TERQUEM, Alfred, in Paris, France, July 17, 1887, aged fifty-six years; professor of physics in the medical school at Lille.
- THRING, The Rev. Edward, at Uppingham, England, November —, 1887, aged sixty-two years; head-master of Uppingham School, 1853-87; author of *Theory and Practice of Teaching*; an eminent educationist.
- TROTTER, The Rev. Coutts, M. A., in Cambridge, England, December 4, 1887, aged fifty years; vice-master of Trinity College, Cambridge, where the teaching of the natural sciences has been largely the result of his labors.
- VISCHER, Friedrich Theodor, in Gmunden, Germany, September 15, 1887, aged eighty years; professor of philosophy at Tübingen, 1837-46, and in the Zurich Polytechnic School, 1856-66; professor of aesthetics at Tübingen, 1866; author of a well-known treatise on *Aesthetics*, in six volumes, etc.
- VON BRINZ, Dr. Alois, in Munich, Bavaria, September 19, 1887, aged sixty-seven years; professor of Roman Law at the universities of Erlangen, Prague, and Munich.
- VON LANGENBECK, Dr. Bernhard Rudolf Conrad, in Wiesbaden, Germany, September 30, 1887, aged seventy-seven years; professor of surgery in the universities at Kiel and at Berlin; surgeon-general of the Prussian army, etc.; one of the most illustrious surgeons of the century.
- WAGNER, E. L., M. D., in Leipzig, Germany, February 10, 1888, aged sixty years; for a quarter century professor of general pathology and pathological anatomy in the University of Leipzig; author of a *Hand-book of General Pathology*, 1862, etc.
- WERNER, Gustav, in Reutlingen, Germany, August 2, 1887, aged about seventy-eight years; founder of manual labor schools and workshops for the training, employment, and care of blind, crippled, and destitute people.
- WINTER, Georg, Ph. D., in Leipzig, Germany, August 16, 1887, aged thirty-nine years; professor of botany in the University of Leipzig.
- WROBLEWSKI, Dr. Sigismund, at Cracow, Poland, April 16, 1888, aged fifty years; professor of experimental physics in the university, 1882.

APPENDIX.

- I.—REPORT ON THE SITKA INDUSTRIAL TRAINING SCHOOL.
 - II.—ADDITIONAL DIGESTS OF STATE SCHOOL REPORTS.
 - III.—RECORD OF THE WORK ACCOMPLISHED BY THE BUREAU OF
EDUCATION FROM AUGUST 5, 1886, TO SEPTEMBER 3, 1889.
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I.—REPORT ON THE SITKA INDUSTRIAL TRAINING SCHOOL.

SITKA, ALASKA, *June 15, 1889.*

Hon. N. H. R. DAWSON,

Commissioner of Education, Washington, D. C.:

DEAR SIR: At a meeting of the Territorial board of education, held last January, at which were present Messrs. Swineford, Sheakley, Duncan, and myself, I was instructed by a unanimous vote to investigate the industrial features of the mission school maintained at Sitka by the Presbyterian Board of Home Missions, and to the support of which the Government annually makes contribution, and to report the results of my investigation to you in writing. Before entering upon that duty I addressed to you a note stating the scope and purpose of that vote and suggesting a hesitancy on my part without your direct approval, which I am pleased to state was given.

Permit me also say that the investigation was ordered by the board of education because William Duncan, Esq., a member of the board, made statements in one of its sessions that some of the pupils in the institution, sent by him from Metlakhatla on Amelia Island, complained to him that they were not given any industrial training—properly speaking, that the sanitary condition of the institution was very imperfect, and that the food was of an improper character. I was accidentally present at an interview between Mr. Duncan and seven or eight of the young men sent by him to this school, and know from what transpired in that interview between him and them that whatever the facts were, at the time he acted in the utmost good faith in bringing the matter to the attention of the board. When here, on that trip of the steamer, I personally know the fact that he removed two young men to their homes on Amelia Island, who were quite seriously ill and threatened with pulmonary disease, contracted, as they represented, by unnecessary exposure in procuring wood rafts for fuel for the institution.

Allow me to say at the outset that I accepted this delicate task with the greatest possible hesitation, because it is difficult in investigations of this kind to avoid the imputation that improper motives have entered into any conclusions which have been reached. I think, since my arrival here and my participation officially in the educational affairs of the district, that I can truly say that not a single act of mine has been prompted other than by the most earnest desire to secure to the public the best possible results from the large expenditure which the Government is annually making for the support of general and industrial education among the natives of Alaska.

The Bureau of Education, yourself particularly, by personal observation, is already familiar with the location, character, and the extent of the grounds and buildings occupied and used for mission and educational purposes at Sitka. I may be permitted, however, for a fuller understanding of what follows herein, to restate that matter. The bay of Sitka at the southwest angle of the town site, extends eastwardly and southeastwardly, the shore line, on the north side of that portion of the bay, forming the arc of a circle. The enclosed grounds of the mission rise gently toward the north and the northeast from this shore line, and the main buildings of the institution are upon an elevation of about thirty feet above sea level. A roadway from the town of Sitka to Indian River, about a mile distant, separates the mission grounds from the beach. The main buildings are about one hundred and fifty feet from the north limits of the roadway. The main buildings have a south frontage, facing the bay. There are two large frame buildings within that enclosure and on that eminence, used by the institution. The western one of these is about one hundred and fifty feet long, from east to west, and is used by the officers and teachers of the institution for dwelling purposes, and also as dormitories for the pupils. Like all buildings which I have seen in southeastern Alaska, this one is unplastered. Many of the rooms, especially those occupied by the officers and teachers, are properly lined with building paper, and thus made quite comfortable, but I observed that the dormitories for the pupils were not so lined and finished. The sleeping places of the pupils are quite large rooms, fitted with plain deal single cots, and the bedding seemed neat and clean.

Several hundred feet southeast of the building just mentioned is another of the same

ground dimensions, similarly built, and three stories in height. The two are connected by a wooden covered way. The latter is divided into class rooms, dining halls, chapel, and dormitories, and is quite a comfortable structure, and in its plan well adapted to the designed use.

In the rear of these are several smaller wooden buildings used as a laundry, bake-house, and other similar necessary purposes. On the southeast side of the roadway to Indian River, and beyond the mission enclosure, about three hundred yards from the easterly main building, is a substantial one story and a half frame building about seventy-five feet long and forty feet wide, known as the industrial building. Its rear abuts directly upon the beach at that point. The first floor is called the carpenter and cabinet shop, and the second floor is called the shoemaker's shop. A few feet to the east of this is a very small structure made of rough boards, known as the blacksmith shop. It only has one fire, and the accompanying set of tools.

One hospital building is situated upon a rising piece of ground several hundred feet from the beach and east of the road to Indian River. Its location is as healthful as can be selected in Alaska. It is a one and a half story frame building about one hundred feet long and forty feet wide; the interior arrangements are excellent and appropriate. A competent physician and surgeon and a skilful nurse or matron are employed by the board of home missions, and constitute a portion of the staff of the institution.

The board of education in the fall of 1888 called the attention of the management of the mission to the fact that the sanitary condition of the buildings and grounds occupied for residence and school purposes could not be satisfactory until a large tundra swamp about twenty rods in rear of these buldings was properly drained by drawing off the accumulating water into the bay. A ditch has been partially completed since that across the west end of the mission grounds, intended to effect this drainage. Attention was also called at the same time to the imperfect condition of the sewerage leading from the main buildings to the point of discharge on the beach. There is now no means of flushing this sewer, and the result is that poisonous and most offensive gases in great quantities are given off, certainly making the vicinity disagreeable and unhealthy and an absolute nuisance to the public compelled to pass this sewer where it crosses the road to Indian River. When the attention of Dr. Jackson, of the institution, was then called to the matter he represented to the board of education that such a change was contemplated by the management as would render this sewerage from the buildings inoffensive by providing water from the Indian River for the purpose of flushing. The cost, not a great deal, to conduct the water from Indian River had been estimated, he stated, and the only obstacle to the making of the improvement was the present lack of funds.

I respectfully urge that the Board of Home Missions in its contract with the Government has entered into no more important and serious obligation in regard to the pupils whose industrial tuition, lodging, and feeding are at some public expense than that in relation to the health of those young people under its care at this institution. This condition of things existed last year. The summer is quite well gone and the sewerage remains the same. It is a duty which the Board of Home Missions owes the Government, as well as the pupils themselves, that the horrid stench and effluvia which arise from this sewer, or simply covered trough, be prevented by the expenditure of the moderate amount estimated by the management here necessary to do so. There has been long enough delay in the matter. The example itself is an unfavorable one to natives whom we are endeavoring to instruct in habits of cleanliness.

I come now to the industrial features of the institution. The third section or paragraph of the contract made by the Government with the officers of the Presbyterian Board of Home Missions, dated July 1, 1888, and to continue for one year, makes some distinction in relation to the obligation of industrial education as the sexes are divided. For the purpose of a better understanding of this report, I shall keep my statements and suggestions in regard to industrial education as provided in that paragraph distinct, as they relate to the two sexes. The contract provides that the Board of Home Missions shall provide a sufficient "number of properly qualified employes to instruct the male pupils of said school in gardening and farming and care of stock; to instruct certain of the male pupils (the number to be determined upon agreement with the party of the first part) in mechanical trades, said trades to be designated by the party of the first part; to instruct the female pupils in cookery, laundry, needlework, and general housewifery; and to teach the pupils the ordinary branches of an English education."

It will be thus seen that the classification of duties and obligations relates first to the male pupils. The provision in relation to "gardening and farming and care of stock" is in part impracticable of execution.

It is true that not all, or very many, of the food vegetables common to the gardens in most of the States can be raised here under ordinary conditions. There are quite a number of root crops, however, such as potatoes, beets, a kind of turnip, lettuce, and cabbage in most seasons, which can be successfully cultivated in gardens, and have been so cultivated by the Russian and creole population of Sitka and the adjacent islands. I

have carefully examined respecting what has been done by the mission management toward experiments in gardening, and I cannot find that any attempt has been made in that respect. The mission has been in existence for many years, and the success in the cultivation of the vegetables I have named has been demonstrated in Russian gardens in existence before the transfer of the Territory to the United States. Land available for gardening has always been easy of access, and not difficult to fit and prepare for that purpose. In fact, several islands upon which flourishing gardens exist belonging to private parties have only recently been appropriated by the latter which might have been secured to the mission for the same purpose. The conditions are not ripe for general farming and stock-raising in Alaska; whether they will ever exist I cannot say, but from what I have carefully observed in regard to what the Russian and the American residents have accomplished for years, in gardening, I have no hesitancy in saying that if a similar contract is entered into with the Board of Home Missions for the fiscal year 1889 it should contain a stipulation requiring the male pupils at least to be instructed in gardening and requiring the mission authorities to make a commencement in that direction. Great as are the food resources of these native people in the waters of Alaska, the time is not far off when it will be greatly diminished and made more difficult to procure. Capital in new canneries is rapidly accumulating, and while these afford employment for a portion of the year to large numbers of the natives their direct tendency is to diminish the supply of food to the natives eventually. The most important step in their civilization and industrial education, especially in view of what I have said respecting the possible failure of their accustomed food supply from the water, is to teach them the benefits of diversifying their food and the means of doing so. I deem this matter so important, in view of the neglect heretofore, that I would suggest the temporary abandonment of all other summer industrial education of the male pupils until this question of gardening was settled and fixed definitely. The land will cost nothing but the labor of clearing it. Some of it is cleared enough to make a beginning already. The Government will supply the seeds, as it supplies many private individuals here now. I desire to press this suggestion, because I have never heard a satisfactory excuse for the delay. It was suggested in the annual report of last year that the Department of the Interior take the initiative in establishing a model farm here, that experiments, among other things, might be made to demonstrate what useful crops might be most successfully and profitably grown in Alaska. I concurred in that report at the time, but it was without due reflection, and it was also due to the further fact that my residence in the Territory had been so short that my opportunity for accurate observation was not such as it has since become. I am free to say that I have revised that opinion and am now clearly convinced that the proper thing to be done is to insist on gardening as the principal object of industrial education for the male pupils at the institution under its contract with the Government.

I do not regard the blacksmith shop a real factor in the industrial education of the male pupils. There is really no blacksmithing in and about Sitka, to amount to anything, giving opportunity to exercise that trade either as an apprentice or pupil or as a journeyman. There are no draught animals on the island, except one pair of mules belonging to the institution and three or four others at Tilton Bay, twelve or fifteen miles south of this, where they are employed for packing purposes. There is not the work and the materials or the demand for the finished product to justify spending any time in that department. The only possible way to educate the young male natives in that handicraft, so that they might earn a living thereby at the various mining establishments rapidly developing in Alaska, is to send them to the States and Territories where they will have an opportunity to serve an apprenticeship that will result in their acquiring a knowledge of the craft.

An instructor in shoemaking is employed by the mission. Not more than a dozen of the eighty-four boys are at work in the shoeshop endeavoring to learn that trade. The natives here are rapidly taking to shoes and abandoning the deerskin moccasin, though many of them are still worn. As the native becomes more advanced in civilization he affects the white man's dress, and now they are important customers to the traders and storekeepers in the matter of ready-made shoes. They are shrewd enough to understand that as well as the whites. I think the most important result, therefore, of the shoemaking department of the institution is the instruction, if properly imparted, in the art of repairing. The natives are large customers of the dealers in rubber goods, and especially boots. The first money they save goes to the purchase of rubber boots, made necessary by their modes of gaining a livelihood by hunting, fishing, cutting and selling wood, etc., and a necessity that will always exist, owing to the peculiar conditions of soil and climate of southeastern Alaska.

While there is a carpenter shop, as I have already mentioned, there is no regular instructor employed in that branch, and as it exists now I do not regard it of any practical value whatever. Five or six cottages have been erected during the past three years on grounds contiguous to the mission by natives, and occupied by them, but there is prac-

tically little instruction of the present classes in the school in that art. Two small houses were erected in the Indian village, or ranche, as it is called, during the past ten months by native skill, by natives living in the village itself. There has been no other opportunity for instruction in house building on the island during that period.

Several of the bright, intelligent native boys at the institution have been instructed as bakers, and do the baking of the mission, and that quite well. When I come to the industrial training of the female pupils I will allude to that subject again.

One of the points of the resolution ordering the investigation which is the subject of this special report was a specific direction that I should advise the management of the mission to desist from the employment of the male pupils in the hazardous task of going off to distant points in inclement weather to prepare log rafts for fuel for the institution, and then when these rafts are brought to the beach near the mission, requiring these pupils to saw and split these logs for use. The manner in which the fuel is procured is this: Available timber near Sitka for that purpose, owing to the long settlement here, is becoming scarce. Groups of these boys and young men are sent out in boats ten and fifteen miles distant to cut logs, get them into the water, put them together into rafts, and then work the rafts up the bay to the beach near the mission for use as fuel. After the rafts are towed in in that way they are broken up, and then the boys are set to work with cross-cut saws to saw them into proper fuel lengths, which is done, and they are also split into proper sizes. Many of these logs are of great length and thickness, and owing to the difficulties of the situation require the labor of hardy, stalwart men, accustomed to that kind of labor, to get them from their places in the woods to their places in the proposed rafts. These rafts have to traverse quite a distance of open sea, and the task is thus hazardous. The labor of sawing and splitting these logs on the beach, often as they are buried in the wet sand of the receding tide, is of the most exacting kind, and owing to the inclement weather prevailing here for the greater part of the year is certainly deleterious to the health of young persons confined to the warm school-room a great part of each day.

Permit me to illustrate this matter from an example. Last fall, the last of October, about a dozen of young men were started out from the mission some ten miles along the coast of this island to cut logs and construct a wood raft for fuel and to bring it in. They were in charge of a white man belonging to the institution. They camped out for four weeks in the timber along the beach and cut and got into the water enough of yellow cedar and spruce logs to build a raft of the estimated capacity of four hundred cords of wood. The raft was completed and ready for departure when a violent storm arose, the raft went to pieces in the open sea, every log cut and put into the water was utterly lost, and the young men who had expended their time and labor for weeks narrowly escaped with their lives.

While it is very important that the male pupils be employed in some manual labor during each week day, I am convinced that this practice of providing fuel for the institution in that way should be abandoned. I am also aware of the difficulty which the Board of Home Missions encounters in procuring funds for the extended and important work in which it is engaged, the mission work in Alaska included, and of how much a burden the cost of purchased fuel would be; but in my opinion, when we consider the health of the male pupils here, it is a far less serious matter than that of the present method of getting wood in rafts by the arduous labor of these young men. When the board of education took action in the matter the four members present agreed with perfect unanimity that the interest which the Government has in the welfare of these pupils demanded the abolition of the plan of supplying the institution with fuel with rafts secured by their labor as I have described.

In the brief annual report which I had the honor to make to you, concerning the general educational condition in Alaska during the past year, I suggested the propriety of Government aid in the erection of a steam saw-mill of moderate capacity in conjunction with such machinery, at a modest expense, as would constitute a plant for the manufacture of lumber for the market here by the labor of these industrial pupils, and for the manufacture of packing cases for the numerous salmon fisheries of southeastern Alaska. Mr. Duncan, at Metlakatla, is pursuing this course in the industrial training which he is giving the people of his settlement. I know that he has been able to secure quite large contracts for supplies of that kind, the benefit of which inures to the natives of that village. I renew and urge this consideration.

I desire now to call attention to the industrial education of the female pupils, under the terms of the contract, a portion of which I have already quoted. An honest effort is being made by the managers and teachers of the institution to instruct these pupils in the ordinary duties of housewifery. One great difficulty is the lack of teachers. What I mean by that is that the teachers are too few for the number of female pupils, considering that the task begins with teaching them to speak English, and then is continued in the instruction of an ordinary English education, and in the industrial training provided in the contract. I find that a steam laundry is attached to the institution by which all

the laundry work, including that of the pupils, is done. I regard the maintenance of this piece of machinery a serious mistake. There is no branch of female duty in which these natives require more urgency in instruction than that of cleanliness of person and clothing. Among the native women of the village here the primitive method of washing clothing and blankets obtains almost universally. That is, they go to a small millstream in the outskirts of Sitka in groups of eight or ten, even in midwinter, once a week, and, entering the water, wash their clothing and blankets by rubbing them upon the boulders of the stream. It is no uncommon thing to see such a group, entirely barefoot, standing in this water, which has just left a glacier not two miles distant, and when the mercury is to freezing point. The girls at the institution are not taught this essential of domestic duty except in theory and by precept. What they want are tubs and wash-boards there for the use of these girls in actual instruction. When they marry and have homes of their own, as is expected, they are not likely to have either servants at hand or steam laundries as part of the household outfit.

I have already spoken of the fact that the baking is done by a small group of boys. I have no criticism of that, so far as it is intended to give those male pupils the means of earning a living in the future in that way; but it seems to me that while female pupils are to be industrially educated in the same institution, it is far more important that they should be thoroughly taught those matters which appertain to their own sex, especially in view of the fact that they will be wives and mothers among the working classes of Alaska for some years to come, than that some of the male pupils should become experts in that branch. The female pupils are making commendable progress in learning to sew. The fact is, that these native women are apt in learning anything of that kind, and the most important thing then at the institution is to ingrain these things as indelible habits.

I think more teachers are needed in the girls' industrial department, and that all the chamber work, all the washing and ironing of clothes, and the plain baking should be done by these girls; this is not important for the purpose of making domestic servants of them, but that they may take their proper places at the heads of native families to which they are destined by nature and circumstances.

The zealous and competent ladies who have come from the States to engage in the laudable work of Christianizing and civilizing the natives of Alaska are doing all that energy and zeal can accomplish in the way of teaching the pupils the English language and the rudiments of an English education, together with a diligent effort at improving their moral condition. The entire management of the institution deserve great credit for what has been accomplished in those directions. It is not my province, in this report, to do more than speak incidentally of the mission work proper of the institution, and then only as it has its influence in shaping character, in connection with the English education which the contract requires to be imparted to the pupils. I have had numerous opportunities of observing the deportment of both the male and female pupils out of school hours, and during their Saturday holidays, and nothing can be more commendable than theirs is always.

I may say here, that a brass band of fifteen pieces was organized among the male pupils, about six months ago, under quite a competent white instructor, and it is really astonishing the aptitude and skill the young men exhibit in this accomplishment. It is a pleasant diversion to those who play, but it is also a refreshing entertainment to the pupils at large. Its effects are, apparently, excellent.

Permit me to make another general suggestion in regard to control of the industrial department. It has been mooted as to the propriety and necessity on the part of the Government to provide an assistant to the general agent of education, who also has an official connection with the mission itself: After a careful consideration of the matter I have come to this conclusion: An assistant should be provided, but he should have no official connection whatever with the Presbyterian Board of Home Missions, nor with any other of any other denomination. He should be assigned to duty at this industrial school, and every industrial interest attached thereto should be intrusted to his management, and he should be responsible alone to the Government for his acts, methods, and conduct. On the other hand, he should have no power in the slightest degree to interfere with the mission work proper of the institution, or with its general educational features, except in regard to the latter as an inspector. Between him and the mission authorities the time could be so divided that the industrial instruction and management would not interfere with the mission and educational work proper, and in case of disagreement the Territorial board might act as an umpire and arbitrator.

The fact that during this fiscal year the Government is paying to the institution the considerable sum of \$12,500, with the prospect of continuing this wise liberality for some time to come, impels me to urge the considerations which I have already stated herein. All the conclusions I have reached are after months of patient investigation and careful reflection.

I desire to make an observation in relation to the employment of teachers. I do not

think that the best judgment has been exercised in that respect, considering the lapse of time. I do not think that the proper effort has yet been made to educate native teachers, and that the work will be retarded to the degree that this matter is delayed. All of the pupils come to the mission with a knowledge of their own native dialect. These people are shrewd and apt and early learn to think, and to think in their own language. The Greco-Russian Church maintains a mission school at Sitka, and, for the purposes of comparison, I have studied its methods. It employs teachers who are not only thoroughly acquainted with Russian and English, but with the Thinklet tongue. The pupils are making quite rapid progress in English through the teacher's ability to make his explanations in the dialect which they have learned at home.

Those who for years have been making this highly commendable and necessary effort to civilize the natives through the mission and industrial school at Sitka have had natural obstacles in their way not known in any other locality where Indian instruction and education are carried on. The climate in many respects is very severe; the soil is not adapted to extensive farming, as it is on the Indian reservations in the States and Territories. There is, therefore, no middle ground in a pastoral, cattle-raising life between the original native methods of procuring a living from the waters and the forest and their ultimate destination in civilization, as in the case of the "Plains Indians" passing from their nomadic career of buffalo hunting to what the Government hopes to accomplish. The rough, rugged nature of the country in Alaska, the almost impassable mountain barriers which hug the coast from the national boundary on the south and far to the westward, render it impossible to remove the pupils during their period of training from the immediate vicinity of the places where their parents and kinsmen earn their living by the primitive methods of fishing and hunting. This is daily in their sight, and constantly keeps alive the tendency to revert to the native customs, habits, and usages. It requires the greatest possible courage, patience, and intelligence to overcome these constantly recurring obstacles. These virtues those engaged in the work have.

What I have said in this report has not been for the purpose of obstructing their work on any of its many sides, but to point out the means by which the object of it all can be accelerated, according to the judgment I have reached after a careful observation of the situation and circumstances.

In conclusion, permit me to thank you for the kindness and consideration I have received from you since our official intercourse began in the interesting and important work of education in Alaska.

Yours, very respectfully,

JNO. H. KEATLEY,
Pres. Board of Education.

II.—ADDITIONAL DIGESTS OF STATE SCHOOL REPORTS.

[Addenda to Chapter IV.]

Below are given summaries of those State School Reports which were not received in season for use in the preparation of Chapter IV.

COLORADO.

[From Report for 1886-87 and 1887-88 of State Superintendent Leonidas S. Cornell.]

STATISTICAL SUMMARY. a

	1886-87.	1887-88.	Increase or Decrease.
POPULATION AND ATTENDANCE.			
Population of school age (6-21).....	65,216	76,212	I.....10,996
Number between 6 and 16 enrolled.....	33,601	45,293	I.....6,692
Number between 16 and 21 enrolled.....	4,300	5,452	I.....1,152
Average daily attendance.....	27,147	31,516	I.....4,369
Per cent. of school population enrolled.....	65	66	I.....1
Per cent. of enrolment in average attendance.....	63	62	D.....1
LIBRARIES AND BUILDINGS.			
Volumes in school libraries.....	13,733	17,375	I.....3,642
Number of school-houses.....	686	820	I.....134
Value of school-houses and property.....	\$2,492,701	\$3,238,021	I.....\$745,320
TEACHERS AND SALARIES.			
Number of male teachers in graded schools.....	102	109	I.....7
Number of female teachers in graded schools.....	447	452	I.....5
Average monthly salary of male teachers in graded schools..	\$108.20	\$101.22	D.....\$6.98
Average monthly salary of female teachers in graded schools..	\$73.47	\$64.40	D.....\$9.07
Number of male teachers in ungraded schools.....	242	253	I.....11
Number of female teachers in ungraded schools.....	599	890	I.....291
Average monthly salary of male teachers in ungraded schools.....	\$50.81	\$51.72	I.....\$0.91
Average monthly salary of female teachers in ungraded schools.....	\$47.74	\$50.55	I.....\$2.81
EXPENDITURES.			
Teachers' wages.....	\$499,187	\$586,242	I.....\$87,055
Buildings, sites, and furniture.....	193,288	306,771	I.....113,483
Total expenditures.....	813,393	1,097,264	I.....283,871
Expenditure per capita of school population.....	13.26	15.12	I.....1.86
Expenditure per capita of enrolment.....	20.16	22.71	I.....2.55
Expenditure per capita of average attendance.....	31.86	36.57	I.....4.71

a Some of the statistics contained in this summary differ slightly from the returns made to the Bureau of Education.

GENERAL STATEMENTS.

During the two school years, 1886-87 and 1887-88, a great advance was made in the condition of the public schools in all parts of the State. Not only was there an increase in the number of schools, but they were of a better grade. There was a very considerable increase in the school population, enrolment, average attendance, and in the expenditures for school purposes. A much wiser and more liberal policy was pursued in the erection and furnishing of school buildings than in former periods. Endeavors were

made to secure the establishment of a definite and uniform course of study, which would certainly be of great advantage.

HIGH SCHOOLS.

In quite a number of places efforts have been made to establish high schools, but there are some serious difficulties in the way. In a majority of the towns and villages there are not a sufficient number of high school pupils to justify the establishment of schools independent of the lower grades. All the high schools should, if possible, be made of a sufficiently high grade to prepare students for the State university. Another difficulty is that although the law has authorized the establishment of union high schools, it has made no provision for the erection of the buildings nor for the maintenance of the schools by taxation.

SCHOOL-HOUSES.

During the year 1887-88 one hundred and thirty-four school-houses were erected. Many of them are large, elegant buildings, arranged with special reference to school purposes. The school buildings of Denver are equal to any either in the East or West. During the last two years splendid school buildings were erected at La Veta, Las Animas, Colorado City, Manitou, Monte Vista, and other towns. School boards should make no mistakes in the construction of school buildings in these days when the most approved plans may be had at very little cost.

ENROLMENT.

Only 66 per cent. of the school population were enrolled in the schools, and in some of the counties the percentage was less. This is a feature much to be regretted, and which should be remedied if possible. A law for compulsory school attendance would probably diminish the evil to some extent.

TEXT-BOOKS.

By a recent enactment of the Legislature, school districts are permitted to furnish all their pupils with text-books at the expense of the district. Quite a number of districts have availed themselves of this privilege, and the plan is found to meet with general approval. One of the great advantages is that it at once secures uniformity of text-books.

LIBRARIES FOR SCHOOLS.

The law authorizes the school boards to levy a tax of one-tenth of a mill for library purposes, but in only a few districts has it been done. The benefits to be derived from school libraries are so great that the districts should at once begin to establish them.

TEACHERS.

Hundreds of teachers from the Eastern States, attracted by the healthful climate and the high salaries, have sought homes among the mountains of Colorado, and many of them who had lost their health have regained it. In this way Colorado has become well supplied with excellent teachers. Many letters are still received by the State superintendent from teachers in the East who desire to change their location.

The law provides that teachers' examinations shall be held on the last Fridays of February, May, August, and November, and at no other time. The questions are prepared by the State superintendent, hence the examinations are uniform as regards both the questions and the times of examinations. Examinations for State certificates are held once every two years, but only a few persons undertake them.

STATE SCHOOL FUND.

"The amount of permanent school fund in hands of the State treasurer November 30, 1888, was \$488,684.85; amount due on deferred land payments, \$112,507.20; making a total to the credit of the State of \$601,192.05.

"The revenue derived from permanent fund as interest and the rentals on school lands have amounted during the past year to a fraction over two dollars *per capita* for all persons of school age, or the sum of \$143,141.70. Such an amount as this brings a much-needed aid to the school work, and reduces in a measure the rate of taxation."

CONNECTICUT.

[From Report for 1887-88 of State Superintendent Charles D. Hine.]

STATISTICAL SUMMARY.^a

	1886-87.	1887-88.	Increase or Decrease.
POPULATION AND ATTENDANCE.			
Population between 4 and 16 years of age.....	153,260	154,932	I.....1,672
Total number enrolled.....	125,794	126,655	I.....261
Average attendance in public schools in winter.....	82,285	83,856	I.....1,571
Per cent. of school population enrolled.....	82.07	81.36	D......71
Number attending other than public schools.....	15,953	17,179	I.....1,226
TEACHERS.			
Number of male teachers in winter schools.....	533	493	D.....40
Number of female teachers in winter schools.....	2,559	2,629	I.....70
Whole number of teachers in winter schools.....	3,092	3,122	I.....30
Number who never taught before.....	378	398	I.....20
FINANCIAL STATEMENT.			
Average wages of men per month.....	\$68.82	\$73.50	I.....\$4.68
Average wages of women per month.....	38.50	38.52	I......02
Total amount paid teachers.....	1,227,413	1,264,061	I.....36,648
Paid for fuel and incidentals.....	148,787	149,823	I.....536
For repairs of school buildings.....	104,911	88,068	D.....16,843
For new school-houses.....	117,861	124,599	I.....6,738
Total amount expended for schools.....	1,768,371	1,813,823	I.....45,452
Cost for each child enumerated.....	10.76	10.90	I......14
Cost for each child enrolled.....	13.12	13.40	I......28
Cost for each child in average attendance.....	20.89	20.82	D......07
Estimated value of school property.....	5,739,895	6,063,269	I.....323,374

^aSome of the statistics contained in this summary differ slightly from the returns made to the Bureau of Education.

EXAMINATION OF THE SCHOOLS.

The board of education determined not to rely simply upon the statistics of the number of children enrolled and in average attendance, the number of days the schools were in session, etc., but to make a thorough and practical examination of the work being accomplished in the public schools. As this could not be done throughout the whole State, it was decided to make the investigation in New London County, which contains two cities, two boroughs, agricultural, mining, and maritime districts, and is therefore fairly representative of the different social and industrial conditions of the State. Every school in this county in session during the time of visitation was inspected by one or more agents of the board, who made inquiries as to the ages of different pupils and the length of time they had attended school, and then examined them in different studies to see what progress they had made. These examinations showed that there were many excellent schools in which the pupils made rapid progress and fully comprehended their studies; but in others the reverse was true.

COMPARISON OF CITY AND COUNTRY SCHOOLS.

In the cities and large manufacturing towns where there are large numbers of foreign-born children attending the schools, liberal appropriations are made for schools, buildings specially adapted to school purposes are erected and furnished with everything needed, the best teachers are employed, and the schools are kept in operation a full term. The children of ignorant, foreign-born parents, knowing little or nothing of the English language, enter a kindergarten attached to one of these schools when only four or five years of age; they continue to attend school until twelve or fourteen years of age when they begin work for themselves. During this time they have learned to speak and read the English language fluently, and have learned to write well; they have learned much about American history and institutions; by the study of geography they have become acquainted with the location of different countries, and with the manners, customs, and conditions of their inhabitants; they have learned enough in arith-

metic to answer all ordinary purposes; they have had instilled into them good moral principles; in brief, they have become bright, intelligent, and fully equipped for life's duties.

But so favorable a report cannot be made when we come to consider the rural schools, where we find the children of the old Connecticut families that have had a part in making the history of the State and in establishing its institutions. The houses in which these schools are taught are old, dilapidated buildings, many of them unfit for use at all; the number of pupils is small, one hundred and ninety-three schools having eight pupils or less; the teachers are inferior to those employed in the cities and large towns, and the school terms are short. It was found upon examination that about two-fifths of the children in these schools above ten years of age could not write, although most of them had been attending school from three to five years. In one hundred and twelve of these schools the old alphabet method of teaching the letters is still in vogue. The progress made in arithmetic also was very unsatisfactory. The board of education has reported these facts just as they found them, "trusting that the people of Connecticut, who assuredly have not lost their attachment to its common school system, will not rest until a remedy is found."

NON-ATTENDANCE.

It was found that there was much irregularity in the attendance of pupils, and that many children of the age for compulsory attendance were not complying with the law. This is attributable in part to the fact that school visitors are unwilling to engage in the unpleasant task of forcing pupils to attend school, a task for which they receive no pay, and which is liable to render them obnoxious to their neighbors.

About eleven per cent. of the delinquents did not attend on account of their mental or physical condition; in some cases the parents were unable to furnish suitable clothing, but "by far the larger number of cases were attributable to laziness, shiftlessness, or drink." It is thought by the State board that the law should entirely forbid the employment of children under sixteen years of age during the sessions of schools, until they can furnish a certificate from proper authorities that they can read, write, and cipher; but children between the ages of fourteen and sixteen might be employed, provided they attend an evening school.

SCHOOL BUILDINGS.

A large number of the school buildings were in need of repairs, or were entirely unfit for use. In New London County alone there were fifty school buildings reported in an unsuitable condition. The variety of desks was very great. Forty-three schools were supplied with new single desks.

TEACHERS.

A great hindrance to successful work in the schools is the frequent changing of teachers. Many schools have a new teacher every term. Of the 182 teachers in New London County, 113 were teaching their respective schools for the first year.

Many of the teachers employed were too young to have charge of schools, and had undergone no special training for the business. But few male teachers were employed.

The examinations of teachers are very unsatisfactory. They are not tests of education, much less of ability to teach. In the employment of teachers other considerations than the welfare of the schools frequently determine the choice. Sometimes a teacher is selected simply because she has been unfortunate, or is in bad health; but more frequently because she is a relative or friend of the committee. Sometimes political or religious influences determine the appointments.

Many of the teachers have never seen a well-conducted school, and consequently do not know what a good school is. If the young teachers were required to spend a certain number of days in the year in a model school like those connected with the State Normal School, they would acquire much valuable information which would greatly enhance their efficiency as teachers.

PRIVATE SCHOOLS.

Some of these were established because of a desire on the part of parents to keep their children separate from the common masses; others on account of dissatisfaction with the management of the public schools, or dislike of teacher or committee.

In some cases the withdrawal of the children of intelligent and cultured people has resulted in deterioration of the public schools.

ILLINOIS.

[From Report for 1886-87 and 1887-88 of State Superintendent Richard Edwards.]

STATISTICAL SUMMARY. a

	1886-87.	1887-88.	Increase or Decrease.
POPULATION AND ATTENDANCE.			
Number of males between 6 and 21 years of age.....	556,199	568,337	I.....12,138
Number of females between 6 and 21 years of age.....	540,265	550,135	I.....9,870
Whole number of persons between 6 and 21 years of age.....	1,096,464	1,118,472	I.....22,008
Male pupils enrolled in graded schools.....	177,388	180,989	I.....3,591
Female pupils enrolled in graded schools.....	182,289	186,913	I.....4,624
Male pupils enrolled in ungraded schools.....	206,068	202,349	D.....3,719
Female pupils enrolled in ungraded schools.....	183,146	181,068	D.....2,048
Whole number of pupils enrolled.....	748,901	751,349	I.....2,448
Average daily attendance.....	506,197	518,043	I.....11,846
Average duration of schools in months.....	7.3	7.3	.....
TEACHERS AND SALARIES.			
Male teachers in graded schools.....	1,312	1,378	I.....66
Female teachers in graded schools.....	5,920	6,313	I.....393
Male teachers in ungraded schools.....	5,416	5,202	D.....214
Female teachers in ungraded schools.....	8,449	8,385	D.....64
Whole number of teachers.....	21,097	21,278	I.....181
Average monthly wages of male teachers.....	\$51.48	\$52.93	I.....1.45
Average monthly wages of female teachers.....	\$42.17	\$43.09	I......92
DISTRICT SCHOOL LIBRARIES.			
Number of districts having libraries.....	1,116	1,239	I.....123
Number of volumes bought during the year for district libraries.....	11,734	31,558	I.....19,824
Whole number of volumes in district libraries.....	123,201	159,166	I.....35,965
PRIVATE SCHOOLS.			
Number of private schools.....	838	914	I.....76
Number of teachers in private schools.....	2,258	2,743	I.....485
Number of pupils in private schools.....	87,825	100,465	I.....12,640
EXPENDITURES.			
Paid male teachers of graded schools.....	\$914,015	\$1,031,844	I.....\$117,829
Paid female teachers of graded schools.....	2,589,972	2,985,538	I.....395,566
Paid male teachers of ungraded schools.....	1,358,104	1,250,749	D.....107,355
Paid female teachers of ungraded schools.....	1,473,185	1,446,385	D.....26,800
Whole amount paid teachers.....	6,335,276	6,714,517	I.....379,241
Total expenditures.....	9,651,935	9,799,721	I.....147,786

a Some of the statistics contained in this summary differ slightly from the returns made to the Bureau of Education.

LOCAL MANAGEMENT OF SCHOOLS.

A prominent feature of the school system of Illinois is the almost entirely local control of the schools. Every township has a board of trustees which determines the boundaries of the different districts, and appoints the township treasurer through whom is distributed the amount of money received by the township from the State fund. They also have control of the township high schools.

But the district directors are the most important school officers. They elect the teacher, determine the teacher's salary, decide what studies shall be pursued, what books used, and what amount of money shall be expended for all purposes except what the law says shall be determined otherwise. In the selection of a teacher, however, they must limit themselves to those persons who have been approved by the county or State superintendent.

POWER OF THE STATE SUPERINTENDENT.

Although the State superintendent is placed at the head of the public school system, the law has invested him with very little power. He can require reports to be made to him by the county superintendents and other school officers, and can withhold from

any section which has not complied with the school laws its proportion of the State school fund. Beyond this, he must rely upon his own efforts and personal influence for accomplishing any purpose. He can be of great assistance, however, by visiting the schools in different parts of the State, conferring with county and city superintendents and other school officers, arranging for teachers' institutes, and collecting and publishing the school statistics.

SCHOOL DISTRICTS.

In the opinion of many of the best educators of the State the interests of the schools would be subserved by making the school districts correspond with the townships. In objection to this, it is stated that there would be too great a centralization of power, and that the present system requires a large number of school directors who receive much information in the discharge of their duties. The improvement of these officers, however, is of much less importance than the interests of the common schools in which over a million children are receiving instruction.

REVISION OF THE SCHOOL LAW.

By a joint resolution of the thirty-fifth General Assembly, the State superintendent was intrusted with the work of revising the laws relating to the public schools. He was assisted in this work by four prominent men of the State, three of whom were engaged in educational work. About sixteen years had elapsed since the last revision, during which time many additions and repeals had been made; moreover, the laws were placed together without any regard to system or to the subject-matter. In order to ascertain the duties of the State superintendent it would be necessary to examine all the school laws, for many provisions relating to him were to be found where they might be least expected. According to the arrangement made by the State superintendent and his assistants, the law consists of sixteen different articles, each relating to a different subject. Each article is subdivided into sections which contain all the provisions of law relating to that subject.

COMPULSORY EDUCATION.

There is already a statute which was designed to secure the attendance of children upon the schools, but it seems to be entirely inoperative. It is doubtful whether it has secured the attendance of a hundred pupils who otherwise would have remained at home. If the ill effects and dangers which follow illiteracy are so great as to necessitate the expenditure of millions of dollars to prevent them, then they are also great enough to obligate the State to see to it that all the children are attending either a public or private school, or have satisfactory reasons for not doing so. An examination of the statistical tables of 1888 shows that after deducting the number of children in attendance upon public and private schools from the total number of children who are between six and twenty-one years of age, there is a balance of 266,658 children not attending any school. It is true that many of these have already secured a fair education and that many others are justifiably absent, but it is quite probable that there are many not embraced in either of these classes.

In Massachusetts, truant officers, who receive a regular salary, are appointed for the special purpose of looking after the youth of school age and seeing that they attend school. In other States children of certain ages are not allowed to be employed in mills or factories. It would not be well for Illinois to adopt such measures too hastily; it should first be seen what can be accomplished by moral influence and by the awakening of a greater interest in education, and such children as cannot be reached in these ways should be made to feel the influence of the law.

HIGH SCHOOLS.

In 1867 the people of Princeton secured the enactment of a law authorizing the establishment of a high school at that place. The school has been very successfully carried on ever since, and Princeton has become an educational centre. Other towns, seeing what had been accomplished there, undertook similar enterprises, and in 1879 a general law was enacted authorizing the establishment of high schools.

Public education should not be limited to the primary elements of an education. In former times a person who could read and write enjoyed quite a distinction, but that time has passed. At the present time unless a person's education embraces more than the ability to read, write, and cipher he is not fully prepared to compete with his fellow-men in the struggles of life.

High schools serve as a stimulus to pupils of the lower grades; for, even if a boy does not care to prepare himself for a high school course, his fellow-students are doing so, and he endeavors to keep step with them. High schools also save parents the expense of sending their children off to boarding schools, by furnishing them the means of higher education in their own township.

MORAL TRAINING.

It is more important that children should be able to discriminate clearly between right and wrong, and that there shall be instilled into them an admiration of what is right and a hatred of what is wrong, than that they shall be intellectually trained. Men will respect the honest and industrious laborer although he may never have entered the door of a school-room; but they will condemn and despise the man who has become so debased as to look with the same feeling upon right and wrong conduct.

Moral instruction cannot be given best from a text-book on the subject. The strongest influence in this direction is that of the teacher's personal character. "Moral health is contagious as well as moral disease. If the teacher shows in his dealings with his pupils that he is animated by the desire to do justice; that he is honest; that in thought and speech and act he is pure, and that in his heart he wishes well to all about him, then the pupils will be likely to take on these virtues. They will be likely to form habits in conformity with the ideals presented; and we know that habits at last become a part of the soul itself. They are inwrought into the very being." The influence of the teacher will be greatly increased if the pupils know that he is a man of much ability, and especially if they know that he appreciates their circumstances and is in sympathy with their feelings. The examples of good and illustrious men and women may be used to impart very effective lessons in morality.

MANUAL TRAINING.

This subject is now receiving much attention, and several manual training schools have been established, among the most successful of which is the Chicago Manual Training School, which is supported by the Commercial Club. Manual training has also been introduced with success into the public schools of Moline and Beardstown. The establishment of institutions for such instruction is very desirable.

It is doubtful, however, whether it should be introduced into all the schools or even into all the grammar schools in the cities. It will very probably not prove to be the panacea for educational ills which its enthusiastic advocates seem to expect; but, on the other hand, it is worthy of careful consideration.

ARBOR DAY.

By an act of the Legislature, approved June 10, 1877, it is made the duty of the Governor in each recurring spring to designate a day, to be known as Arbor Day, which is to be observed by the planting of trees, shrubs, and vines about the homes and along the highways, and about the public grounds within the State. The wisdom of such a measure will not be questioned in Illinois, where the value of trees was recognized by the first settlers, and where the planting of them has been so long encouraged.

INDIANA.

[From Report for 1886-87 and 1887-88 of State Superintendent Harvey M. La Follette.]

STATISTICAL SUMMARY.

	1886-87.	1887-88.	Increase or Decrease.
POPULATION AND ATTENDANCE.			
White youth of school age (5-21).....	742,866	739,239	D.....3,627
Colored youth of school age (5-21).....	17,663	17,750	I.....87
Whole number of school age.....	760,529	756,989	D.....3,540
White children enrolled in schools.....	502,091	505,965	I.....3,874
Colored children enrolled in schools.....	7,784	8,498	I.....714
Whole number enrolled.....	509,875	514,463	I.....4,588
Average daily attendance.....	387,194	408,775	I.....21,581
Length of school term in days.....	130	133	I.....3
TEACHERS AND WAGES.			
White teachers.....	13,863	14,047	I.....184
Colored teachers.....	153	155	I.....2
Whole number of teachers.....	14,016	14,202	I.....186
Average daily wages of—			
Men teaching in townships.....	\$2.02	\$2.07	I.....\$0.05
Women teaching in townships.....	1.81	1.90	I......09
Men teaching in towns.....	3.01	3.00	D......01
Women teaching in towns.....	1.91	2.01	I......10
Men teaching in cities.....	3.49	3.87	I......38
Women teaching in cities.....	2.33	2.44	I......06
Average daily wages of male teachers in the State at large..	2.18	2.26	I......08
Average daily wages of female teachers in the State at large	1.83	1.87	I......04
SCHOOL PROPERTY.			
Number of school-houses.....	9,847	9,882	I.....35
Estimated value of school-houses, grounds, etc.....	\$13,798,459	\$13,941,873	I...\$143,384
Estimated value of school apparatus.....	720,416	809,942	I... 89,526
Total value.....	14,518,905	14,751,815	I... 232,910
SCHOOL REVENUES.			
State's apportionment to counties of common school revenue.	\$1,957,156	\$1,875,423	D...\$81,733
Congressional township fund, interest.....	197,748	218,119	I..... 20,371
Amount of local tuition tax.....	974,432	1,208,237	I...233,785
Proceeds from liquor license.....	331,257	344,343	I..... 13,086
Total tuition revenue from all sources.....	3,460,612	3,646,122	I...185,510
Special school revenue for the year.....	1,559,306	1,584,910	D..... 25,604
Total school revenue.....	5,049,918	5,235,032	I...185,114
SCHOOL FUNDS.			
Common school fund held by counties.....	\$3,163,859	\$3,247,644	I...\$83,785
Non-negotiable bonds made by the State.....	3,904,783	3,904,783	I.....
Congressional township fund.....	2,548,608	2,502,125	D... 46,483
Total amount of school funds.....	9,617,250	9,654,552	I..... 37,302

GENERAL CONDITION.

The public school system of Indiana was established by men of broad and liberal views who were fully impressed with the importance of educating the youth of the State, and hence it has never been found necessary to go back and re-establish the system upon a new basis or upon a different plan. But whenever it has been found that an improvement could be made, there has been no hesitancy in adopting it. Thus, the old district system has given way to the more efficient township system, and county examiners have been superseded by county superintendents.

Notwithstanding the great decrease in the assessed value of real estate, the schools have suffered no decrease in the length of terms, and there has been an improvement in the condition of the primary schools. This improvement is due in large measure to the higher qualifications of the teachers, who have associated themselves together in reading circles for the purpose of carrying on a systematic and professional course of reading. In the smaller towns and villages, however, on account of the selection of incompetent and inexperienced teachers from political or social reasons, the schools have not progressed so well.

The uniform course of study for country schools which was adopted by the State convention of county superintendents in 1884 has proved to be of immense benefit to the schools, and when a few modifications found advisable shall have been made, the schools will have a definite and regular course laid out for pupils during each year of their attendance.

COMPULSORY ATTENDANCE.

The State superintendent emphasizes the importance of the enactment of such laws as will secure the attendance at school of all children of school age who are not disqualified mentally or physically, or who are not in private schools. The right of parents to have their children educated in private schools or at home should always be fully recognized and respected, but it should be required that the instruction there given be equal to that given in the public schools. The necessity for compulsory attendance is palpable when we consider that the school property of the State is estimated at fifteen million dollars, and that the annual expenditure for schools is five million dollars, but that only sixty-eight per cent. of the children of school age are enrolled, and only fifty-four per cent. of them are in average attendance. If the statistics of the attendance were properly kept and returned it would be found that the attendance was much less than that here represented.

THE STATE BOARD OF EDUCATION.

The superintendent thinks that the State board of education should be enlarged by the addition of three county superintendents, not more than two of them to be of the same political party, and that the powers of the board should be increased. It should have sole power to commission high schools for the admission of graduates therefrom into the Freshman class of the three State institutions; it should have control of both county and township institutes; it should prescribe lists of books from which additions should be made to the township libraries; and it should be empowered to adopt such regulations as it might deem essential to the interests of the schools.

TOWNSHIP TRUSTEES.

On account of the township trustees being guardians of the poor, inspectors of elections, and supervisors of roads and bridges, they are in a large number of cases, perhaps in a majority of cases, not selected with reference to their qualifications as school trustees. On this account school officials should be entirely distinct from those having charge of elections, roads, and bridges.

TOWNSHIP LIBRARIES.

In all townships where there are no libraries they should be established, and additions should be made to those already established. They should be managed according to rules and regulations made by the State board of education.

COUNTY SUPERINTENDENTS.

They should be furnished with suitable offices and should be paid for all necessary expenses of printing, stationery, etc. As they are required to visit the different schools and to examine the papers of a large number of applicants for teachers' licenses, a faithful performance of which duties requires considerable ability and much time and labor, no one can question the justice and propriety of paying them a suitable salary.

HIGH SCHOOLS.

The popular appreciation of, and demand for, the advantages of secondary education is manifested by the fact that under a permissive statute there have been established nearly five hundred high schools and graded schools with higher courses of study, all of which are in a prosperous condition. The graduates of one hundred of these schools are permitted by the regulations of the board of education to enter the Freshman class of Indiana University, Purdue University, and the State Normal School without examination. The time has arrived when high schools should be established in all parts of the State upon such a system and with such a standard, to be prescribed by the State board of education, as would permit their graduates to enter the Freshman class of the three institutions above named without examination.

SCHOOL FUNDS.

During the past two years special attention has been given to the status of the school funds in the various counties, and, as a result, there were collected each year about twelve thousand dollars more than in the preceding years and about two hundred thousand dollars were added to the permanent funds.

There are two distinct funds devoted to school purposes, the Congressional township fund, and the common school fund; the latter is made up of the surplus revenue fund received from the United States Government in 1837, the bank-tax fund derived from a tax on the State bank chartered in 1834, the saline fund, the sinking fund, and the semi-annual fund.

MAINE.

[From Report for 1887-88 of State Superintendent N. A. Luce.]

STATISTICAL SUMMARY, a

	1886-87.	1887-88.	Increase or Decrease.
POPULATION AND ATTENDANCE.			
Youth of school age (4-21).....	212,621	212,156	D.....465
Number attending during the year.....	143,761	144,238	D.....1,503
Average registered attendance per term.....	122,308	121,192	D.....1,116
Average daily attendance per term.....	101,322	100,122	D.....1,200
Per cent. of whole number attending to whole number in State.....	68	68	.....
Per cent. of average registered attendance to whole number in State.....	57	57	.....
Per cent. of average daily attendance to whole number in State.....	43	47	D.....1
Per cent. of average daily to registered attendance.....	82 $\frac{1}{2}$	82 $\frac{1}{2}$	.....
Average length of schools in days.....	112	112	.....
SCHOOLS AND SCHOOL-HOUSES.			
Number of different schools.....	4,759	4,793	I.....34
Number of graded schools.....	834	919	I.....85
Number of ungraded schools.....	3,925	3,874	D.....51
Number of school-houses in State.....	4,318	4,337	I.....19
Number reported in good condition.....	3,144	3,155	I.....11
Number built during the year.....	64	77	I.....13
TEACHERS AND SALARIES.			
Men teaching in spring and summer terms.....	418	269	D.....149
Men teaching in fall and winter terms.....	1,592	1,565	D.....27
Women teaching in spring and summer terms.....	5,218	4,643	D.....575
Women teaching in fall and winter terms.....	3,059	3,840	I.....781
Number of different teachers employed during the year.....	7,585	7,598	I.....13
Number of teachers continued in same school through year.....	1,862	2,064	I.....202
Number having previous experience.....	6,474	6,366	D.....108
Number not having previous experience.....	1,111	1,232	I.....121
Number who were graduates of normal schools.....	657	658	I.....1
Average wages of men per month, excluding board.....	\$33.82	\$34.36	I.....\$0.54
Average wages of women per month, excluding board.....	\$16.55	\$16.92	I.....\$0.36
EXPENDITURES.			
Total current expenditures.....	\$1,058,936	\$1,057,513	D.....\$1,423
Cost of new school-houses.....	160,861	133,761	D.....27,100
Cost of supervision.....	32,532	33,287	I.....755
Total school expenditures.....	1,252,329	1,224,561	D.....27,768
Average current expenditure per pupil enrolled.....	7.26	7.34	D......08

a The statistics contained in this summary differ slightly from the returns made to the Bureau of Education.

ATTENDANCE.

There was a small decrease in the number of persons of school age in the State, as was the case in the previous year also. The aggregate decrease for the last decade, however, was only 2,641, while in the preceding decade the decrease was 10,403. It is a legitimate inference, therefore, that the decrease in school population will soon entirely disappear.

When it is remembered that almost one in every three of those entitled to school privileges is not attending, and that almost one in every five of those who do attend is a truant, it becomes manifest that the schools are not accomplishing what they should. This fact cannot be denied, but the evil of non-attendance is not so great as might at first be supposed. There are several ways in which to account for it. Many children are kept at home during the first two years they are entitled to school privileges, because their parents consider them too young to attend school. Some do not attend because they have already reached a grade of education higher than can be furnished by the schools to which they are accessible. Others do not attend on account of poverty and the cost of text-books; others on account of parental indifference or greed. Free text-books should banish one of these obstacles; an efficient truant law should overcome another.

SCHOOLS AND SCHOOL TERMS.

The tendency to consolidate small and poor ungraded schools into a few large and well-managed graded schools has become quite marked of late. During the last six years there has been a decrease of three hundred and twelve in the number of ungraded schools, and an increase of one hundred and fifty in the number of graded schools; this indicates that there has been a better grade of teachers, better supervision and accommodations, and better work accomplished.

The average term of the schools was only twenty-two weeks and two days, and many schools had much shorter terms. Very little benefit can be obtained during such short terms; nor is it equitable to limit one school to a term of three months while the school adjacent to it is maintained eight months.

It is not necessary that larger amounts be appropriated to the schools in order to secure longer terms, but by discontinuing many small and unnecessary schools, and by abolishing the district system, which is the source of much waste and criminal misuse of funds, it is probable that at least two weeks could be added to the average annual length of the schools.

TEACHERS.

The number of women teaching still continues to increase, but there was a decrease in the number of male teachers. As the services of women can be obtained at much lower rates than the services of men, and as there was an increase in the salaries of women teaching, it is to be inferred that there was an improvement in the qualifications of the teachers. Another favorable indication was the increased number of teachers continued in the same schools, but the number of changes of teachers is still entirely too large.

TEXT-BOOKS AND APPLIANCES.

It is a matter of congratulation that hereafter both uniformity and a full supply of text-books can be secured, as the Legislature in 1889 provided that school books should be furnished to the pupils of each town at the expense of the town. This law is to go into effect in August, 1890.

As regards maps, globes, charts, etc., the ungraded schools are very poorly supplied. In but one of every three ungraded schools is there a wall map, in but one of every eight is there a chart of any sort to aid in teaching, and in but one of every nine is there a globe.

RESOURCES AND EXPENDITURES.

The increases and decreases in respect to income and expenditures were practically the same as in the previous year. A larger sum was expended for teachers' wages, but this was offset by a smaller expenditure for incidental repairs of school-houses. The State superintendent thinks that a great deal of the school money is wasted and misused; until this is remedied, it is not desirable that the school funds be increased.

DISTRICT SYSTEM.

The State superintendent is strongly in favor of the Legislature abolishing the district system and substituting the town system therefor. One of the advantages arising from it would be equality of school privileges throughout each town. Under the present system, school funds are divided among the schools in proportion to the number of pupils in each district; in this way thinly populated districts receive only enough money to maintain a school for a very short term, while populous districts receive more money than they need.

By making the change, equality of taxation, better teachers, better supervision, better school-houses, economy of taxation, and longer school terms would be secured, and many unnecessary schools would be abolished.

A large majority of the intelligent and influential citizens of the State are in favor of the change; it has already been adopted in many towns, and in those towns which have not yet adopted it, it has many supporters.

COMPULSORY ATTENDANCE.

According to the law of 1887 all children between the ages of eight and fifteen years are required to attend school each year for at least sixteen weeks. Although this law has been in force only a short time, several serious defects have been discovered. Many towns have failed to elect the truant officers required by law, although such towns are liable to prosecution and fine. Children that have been furnished for a like period of time with instruction equal to that of the public schools are exempt from the requirement, but no provision has been made for determining this. According to the provisions of the law, attendance cannot be enforced until so much of the term has elapsed that the required amount of time cannot be had in the remainder of the term. Besides, when pupils enter a graded school at the middle or last of a term they cannot be properly classified.

FREE HIGH SCHOOLS.

The high schools are becoming more and more an essential part of the public school system, and they are already doing a very important work in furnishing a large and constantly increasing number of teachers for the common schools.

NEW LEGISLATION.

Free text-books.—The Legislature of 1889 enacted that after August 1, 1890, the pupils should be furnished with text-books at the expense of their respective towns.

Evening schools authorized.—Cities and towns were authorized to raise money to support evening schools.

School laws to be published biennially.—It is made the duty of the State superintendent every two years to publish the amended school laws, and, also, such circulars of information and advice to school officers as may be necessary.

MARYLAND.

[From Report for 1887-88 of Hon. M. A. Newell, Secretary of the State board of education of Maryland.]

STATISTICAL SUMMARY.

	1886-87.	1887-88.	Increase or decrease.
SCHOOLS AND ATTENDANCE.			
Number of schools in Baltimore City	124	128	I .....4
Number of schools in the counties	2,000	2,031	I .....31
Total	2,124	2,159	I .....35
Number of months schools were open in Baltimore City	10	10	I .....0
Number of months schools were open in the counties	8.6	8.8	I .....0.2
Number of pupils enrolled in Baltimore City	51,221	54,210	D .....1
Number of pupils enrolled in the counties	121,177	122,377	I .....1,200
Total	173,398	176,587	I .....1,189
Highest number enrolled in one term in Baltimore City	40,872	41,555	I .....683
Highest number enrolled in one term in the counties	104,501	106,687	I .....2,186
Total	145,373	148,242	I .....2,869
Average number in daily attendance, Baltimore City	34,843	33,969	D .....874
Average number in daily attendance, counties	61,567	61,007	D .....560
Total	96,410	94,976	D .....1,434

STATISTICAL SUMMARY—Continued.

	1885-87.	1887-88.	Increase or decrease.
TEACHERS AND SALARIES.			
Number of male teachers in Baltimore City.....		98	.....
Number of male teachers in the counties.....		1,040	.....
Number of female teachers in Baltimore City.....		909	.....
Number of female teachers in the counties.....		1,621	.....
Total number of teachers.....	3,551	3,668	I.....117
Average yearly salary of teachers in Baltimore City.....		\$587.25	.....
Average yearly salary of teachers in the counties.....	\$276.42	\$271.66	D.....\$4.76
Average for the State.....		\$353.28	.....
EXPENDITURES.			
Teachers' salaries, Baltimore City.....	\$589,764	\$604,334	I.....\$14,570
Teachers' salaries, counties.....	713,722	740,171	I.....26,449
Total for teachers' salaries.....	1,303,486	1,344,505	I.....41,019
Building, repairing, and furnishing school-houses in Baltimore City.....	109,444	66,464	D.....42,980
Building, repairing, and furnishing school-houses in the counties.....	95,949	97,089	I.....1,140
Total.....	205,393	163,553	D.....41,840
Books and stationery, Baltimore City.....	41,927	40,304	D.....1,623
Books and stationery, counties.....	57,960	49,584	D.....8,376
Total.....	99,887	89,888	D.....9,999
Rent, fuel, and incidentals, Baltimore City.....	60,645	59,505	D.....1,140
Rent, fuel, and incidentals, counties.....	61,244	62,416	I.....1,172
Total.....	121,889	121,921	I.....32
Total public school expenditures, Baltimore City.....	810,754	781,604	D.....29,150
Total public school expenditures, counties.....	1,021,072	1,048,574	I.....27,502
Total public school expenditures.....	1,831,826	1,830,178	D.....1,648

HIGH SCHOOLS AND ACADEMIES.

"In most instances the academy is now incorporated into the county school system; in a few cases the original independence is maintained, and in a few others there is an understanding between the trustees of the academy and the board of county school commissioners, by which the former continue to hold the title to the property, while the latter receive the 'donation' and conduct the business. In 1886 it seemed to be the policy of the State to give each of the counties \$1,200 a year for the support of an academy. This sum has been regularly paid to the academy, if one were in existence, and if not, to the school commissioners for the use of the public schools."

Superintendent Newell considers it essential to the cause of higher education in the State that there shall be maintained in every county at least one high school or its equivalent; or, where this shall be found impracticable, that there shall be at least one teacher in the county who can prepare pupils for entrance to college.

NEW LEGISLATION.

The State tax for schools was raised from ten cents to ten and one-half cents on the hundred dollars, and the appropriation for colored schools was raised from one hundred thousand to one hundred and twenty-five thousand dollars on certain conditions.

"The elements of agricultural science may, in the discretion of the State board of education, be taught in the State Normal School and in the public schools of the State.

"Chapter 336 re-enacts the corresponding sections of the public school law relating to teachers' certificates, with the proviso that after six months' probation the examiner may issue a certificate which shall continue in force for five years." Heretofore the period was limited to three years.

Garrett County was added to those (Montgomery, Prince George, Charles, and Caroline) in which the school commissioners are appointed, not by the judges of the circuit court as in the other counties, but by the Governor, "by and with the consent of the senate."

MASSACHUSETTS.

[From Report for 1887-88 of Hon. John W. Dickinson, Secretary of State Board of Education.]

STATISTICAL SUMMARY.

	1886-87.	1887-88.	Increase or Decrease.
POPULATION AND ATTENDANCE.			
Number of persons between 5 and 15 years of age	353,052	359,504	I.....6,452
Number of pupils of all ages enrolled.....	353,361	358,000	I.....4,639
Average membership of pupils in all the public schools.....	291,539	293,941	I.....2,402
Average attendance in all the public schools	262,159	264,723	I.....2,564
Per cent. of attendance based upon average membership.....	90	90	.....
Number of pupils over 15 years of age	23,968	29,543	I.....575
Average duration of schools, in months.....	8 $\frac{2}{3}$	8 $\frac{2}{3}$	.....
TEACHERS AND SALARIES.			
Number of male teachers.....	1,033	1,010	D.....23
Number of female teachers.....	8,696	8,887	I.....191
Number of teachers necessary to supply schools.....	8,520	8,559	I.....39
Average monthly salary of male teachers	\$116.85	\$119.34	I.....\$2.49
Average monthly salary of female teachers.....	\$44.93	\$44.83	D.....\$0.05
FINANCIAL STATEMENT.			
Amount raised by taxation for teachers' wages, fuel, care of fires and school-rooms.....		\$5,114,402	.....
Amount expended for ordinary repairs.....		468,653	.....
Amount expended upon public schools alone, exclusive of repairing and erecting school-houses.....		5,934,199	.....

TAXATION FOR SCHOOLS.

There is a great disparity in the amount of money appropriated to each child in the different towns and in the percentage of valuation appropriated. The towns which appropriate the smallest sums per capita of school population are the ones in which the highest percentage of valuation is appropriated to school purposes. This shows that the weaker towns are making efforts to place their schools in as good condition as the best schools. It is the opinion of the board of education that the Commonwealth should furnish greater financial aid to these poor country towns, and that this can be done in such a way as not to impair the habit of self-reliance which has so long existed in them. The towns particularly needing this assistance are situated along Cape Cod and in the western part of the State, remote from business centres and the great lines of travel.

HIGH SCHOOLS.

"High schools have been maintained the past year in one hundred and ninety-eight cities and towns. Forty-four towns, not required by law so to do, have maintained high schools. The whole number of such schools maintained the past year is two hundred and thirty. They are furnishing instruction to over twenty-two thousand pupils, and the population of the cities and towns in which high schools are maintained is over ninety-five per cent. of the whole population of the State. These figures furnish striking evidence of the high estimation placed upon the benefits of the education furnished by high schools.

"These schools are of two grades; the lower furnishing instruction in all those branches necessary to qualify youth to fill successfully most of the business pursuits and vocations of life, and the higher furnishing instruction in all required for admission to colleges and universities. High schools have, in recent years, made decided progress in all directions, especially in their organization and methods of instruction; and while they are still capable of much improvement, they are now worthy of the full confidence and the generous support which have been accorded them."

EVENING SCHOOLS.

All cities and towns having ten thousand or more inhabitants are required to maintain evening schools for the instruction of pupils over twelve years of age. There were two hundred and fourteen such schools, with an attendance of twenty-four thousand

seven hundred and twenty-five pupils. Five cities and towns failed to comply with the law, but eighteen towns maintained schools which were not required by law to do so. The most discouraging feature connected with the evening schools is the low average attendance—a difficulty not easily remedied.

TEACHERS.

The number of male teachers is steadily decreasing. There are fewer changes of teachers, however, and consequently those employed are enabled to do better work, and teaching becomes more like a profession. A larger number of teachers are graduates of normal schools, the ratio of normal school graduates to the whole number of teachers having increased in the last eight years from twenty-two to twenty-seven per cent. The salaries of teachers have increased quite rapidly; particularly is this true of male teachers, the average monthly salary of whom is \$119.34. The standard of teachers' qualifications has been raised even more rapidly than the compensation.

PRIVATE SCHOOLS.

The number of children reported as attending private schools is thirty-seven thousand two hundred and ninety-one, which is a much larger number than ever before, and is more than twice as many as attended private schools ten years ago.

SUPERVISION.

The importance of competent supervision of the schools has been so generally acknowledged that twenty-eight towns and all but two cities in the State have for years employed a superintendent of schools, but in the smaller towns there has been no supervision except that given by the occasional visits of the school committees. Provision was long ago made by law for the union of two or more towns in the employment of a superintendent; but, either on account of the expense of having a superintendent or on account of anticipated difficulties in the joint action of districts, no towns availed themselves of the privilege. In 1888, however, it was enacted that if any two or more towns, the valuation of each of which does not exceed two and a half millions of dollars, together raised and appropriated for the employment of a superintendent not less than seven hundred and fifty dollars, the State should furnish them five hundred dollars to supplement the superintendent's salary, and five hundred dollars more to be used in paying the salaries of teachers. Hence, any district that raises seven hundred and fifty dollars for the employment of a superintendent receives one thousand dollars from the State. Several districts have already taken advantage of this offer, and it is thought that eventually all the towns will be thus provided with superintendents.

FREE TEXT-BOOKS.

The law providing for free text-books has been in operation about five years. It seems, from the returns, to have increased the school attendance more than ten per cent.; in the high schools especially it was immediately followed by a largely increased attendance. The testimony in favor of the law is decided and unanimous.

STATE AGENTS.

By reason of the increased appropriations for State agents, the board of education was enabled to increase the number of agents to five. The duties of agents are to visit the schools, confer with teachers and committees, conduct teachers' meetings, etc. They are general superintendents of the schools.

One of the agents was employed for the special purpose of introducing industrial drawing into the public schools and of giving instruction in that branch. Much interest in this department has been awakened, and the teachers are earnestly endeavoring to acquaint themselves with it.

The State was divided into four parts, and each of the other agents was detailed to look after the schools in one of these sections. Their attention was given especially to the schools of the smaller towns, which have little or no intelligent supervision, and consequently their services were of great value.

PHYSICAL EDUCATION.

"As the body is the instrument which the mind uses in its efforts for knowledge and development, every complete system of education should include in its provisions a carefully prepared plan of physical training. Not only should the conditions of physical health be observed in selecting the location and site of the school-house, in its construction and in its use, but they should also be observed in directing the children to good habits of living and study. The value to the individual of a sound body cannot be overestimated. Health is a condition of right intellectual and moral development, of usefulness and happiness. To secure it the laws of health must be observed from the earliest years of the child's life. This must be done under the wise direction of parents at home and of teachers at school until the child has acquired knowledge and self-control enough to enable him to take care of himself.

"In the examination of teachers for the public schools, their knowledge of the principles and methods of physical education should be determined with the same care as is exercised in testing their ability to teach any of the branches of learning."

CHARACTER OF PUBLIC SCHOOL INSTRUCTION.

The public schools are regarded by some as Godless institutions. While it is true that the public schools do not teach any particular form of religion, it is also equally true that they are not anti-religious.

"The people will never submit to a general tax for ecclesiastical objects concerning which the State has no right to express any opinion, and over which it has no right to exercise any control, but they will freely support those institutions whose exclusive aim it is to train their pupils to become intelligent, virtuous, and loyal citizens of a free commonwealth. While the public common school, from the nature of the case, must exclude from its exercises those topics of study and that training which have for their objects special forms of religious belief and religious service, it should with great fidelity communicate a knowledge of the moral qualities of human conduct and furnish occasions for acquiring facility in the practice of every virtue."

"What harm can come to a true religion from the ability to read or to perform arithmetical problems; from a knowledge of the constitution and uses of things in the natural world; from an understanding of the principles and forms of our civil government; from the power to reason correctly; from a training in the practice of good manners, or from the cultivation of the virtues which are the ornament of society and the basis of a republican constitution?"

MISSISSIPPI.

[From Letter of State Superintendent J. R. Preston to the Commissioner of Education, May 17, 1889.]

"Public education is steadily advancing in Mississippi. Within the past year we have expended over two hundred thousand dollars in school buildings, some towns having put up twenty-five and thirty thousand dollar buildings for graded schools. Nearly all our towns of fifteen hundred inhabitants and over have graded schools in session from seven to ten months, and several counties this year will have six months of free school in the country districts. The cause is prospering with us, and we have strong and abiding hopes that an educational revival is not far in the future."

NEW JERSEY.

[From Report for 1887-88 of State Superintendent Charles W. Fuller.]

STATISTICAL SUMMARY.

	1886-87.	1887-88.	Increase or Decrease.
POPULATION AND ATTENDANCE.			
Population 5 to 18 years of age	374,011	387,847	I.....13,836
Total enrolment	224,107	224,398	I.....291
Number in average attendance	131,867	135,187	I.....3,320
Number the schools will seat	205,835	209,542	I.....3,707
Number attending private schools.....	37,830	46,475	I.....8,645
Number attending no school.....	107,007	109,790	I.....2,783
Percentage of average attendance	59	60	I.....1
Percentage attending public schools	61	59	D.....2
Percentage attending private schools.....	10	12	I.....2
Average duration of schools, in months.....	9.5	9.6	I.....0.1

STATISTICAL SUMMARY—Continued.

	1886-87.	1887-88.	Increase or decrease.
TEACHERS AND SALARIES.			
Men teaching.....	825	796	D.....29
Women teaching.....	3,177	3,325	I.....148
Average salary of men per month.....	\$64.07	\$67.24	I.....\$3.17
Average salary of women per month.....	\$41.34	\$42.35	I.....\$1.01
REVENUE.			
State school tax appropriated.....	\$1,456,660	\$1,870,055	\$413,395
Additional State appropriation.....	100,000	100,000	
Township school tax.....	62,473	48,992	D.....13,481
Interest of surplus revenue.....	31,863	32,084	I.....216
District and city tax for teachers' salaries.....	423,692	474,293	I.....50,601
Total amount for maintaining schools.....	2,074,692	2,525,425	I.....450,733
District and city tax for building and repairing school-houses.....	571,184	590,016	I.....18,832
Total amount for school purposes.....	2,645,876	3,115,441	I.....469,565

REVENUE.

The recent act of the Legislature raising the amount of State school tax from four dollars to five dollars for each child between the ages of five and eighteen, together with the increase of 13,836 in school population, resulted in the receipt of a much larger school fund than heretofore and the payment of much better salaries to teachers. The school funds received from the State are sufficient to meet all current expenses of the schools in the rural districts, but in the cities and larger towns it is found necessary to raise an additional amount.

TEACHERS AND SALARIES.

On account of the higher rate of State taxes for schools and also on account of the act passed in 1887 which provided for the re-apportionment of any balances of the State appropriation remaining in the hands of township collectors, the salaries of teachers have been higher than ever before. The average annual salary of men in cities was \$1,265.23; of women, \$473.29.

Twenty-seven per cent. of the teachers in the State have taught in the same school one year or less, thirty-eight per cent. between one and five years, seventeen per cent. between five and ten years. The average for all the teachers was five years and five months, an increase of seven months. The average total experience of teachers in the State was eight years and three months.

SCHOOL-HOUSES.

The number of school-houses in the State is 1,615, but of this number 157 were rated by the county superintendents as poor or very poor. Thirty new buildings were erected during the year. The average value of the school-houses of the State is \$5,005. The total value of school property in the State is \$7,837,706.

The necessity for greater school accommodations is again brought prominently forward by the State superintendent, who says that while the school population is increasing from year to year the number of school-houses remains about the same. The seating capacity of the school-houses was only sufficient for fifty-four per cent. of the school population, while there was an attendance of fifty-nine per cent., showing that there was an overcrowding of the school-rooms by four per cent. of the school population. In the cities, however, the overcrowding was still greater. In some of them it was found necessary to adopt half-day sessions for the primary grades. Sixty-three rooms were reported as having over eighty pupils and twenty-one rooms had over one hundred pupils.

The superintendent heartily endorses the recommendation that plans and specifications for school-houses be prepared and kept in the office of the State superintendent, where they may be examined and adopted by district officers when about to build school-houses.

In regard to the furniture of the schools, a steady improvement has been noted; means have also been provided by which the schools, at a slight expense, can provide themselves with reference books and the ordinary library books.

OHIO.

[From Report for 1887-88 of State Superintendent John Hancock.]

STATISTICAL SUMMARY. *a*

	1886-87.	1887-88.	Increase or Decrease.
POPULATION AND ATTENDANCE.			
Number of boys between 6 and 21 years of age.....	567,391	563,964	D.....3,427
Number of girls between 6 and 21 years of age.....	535,330	533,278	D.....2,052
Total number between 6 and 21 years of age.....	1,102,721	1,097,242	D.....5,479
Number enrolled in township districts.....	448,191	448,819	I.....628
Number enrolled in separate districts.....	318,839	328,397	I.....9,558
Total enrolment.....	767,030	777,216	I.....10,186
Per cent. of enrolment on enumeration, in townships.....	81.06	81.00	D......06
Per cent. of enrolment on enumeration, in separate districts.....	57.73	59.00	I.....1.27
Per cent. of daily attendance on enrolment, in townships.....	62.33	63.50	I.....1.12
Per cent. of daily attendance on enrolment, in separate districts..	75.12	74.50	D......62
TEACHERS AND SALARIES.			
Number of men.....	10,839	10,933	I.....94
Number of women.....	13,852	13,925	I.....73
Total number.....	24,691	24,858	I.....167
Number necessary to supply the schools.....	18,603	18,893	I.....290
Average monthly wages in township primary schools:			
Men.....	\$37.00	\$37.00	I......00
Women.....	26.00	27.00	I.....1.00
In township high schools:			
Men.....	61.00	64.00	I.....3.00
Women.....	44.00	48.00	I.....4.00
In separate district primary schools:			
Men.....	58.00	64.00	I.....6.00
Women.....	41.00	43.00	I.....2.00
In separate district high schools:			
Men.....	78.00	78.00	I......00
Women.....	61.00	64.00	I.....3.00
SCHOOL-HOUSES.			
Number erected in townships.....	330	339	I.....9
Number erected in separate districts.....	42	57	I.....15
Whole number erected.....	372	396	I.....24
Whole number in the State.....	12,589	12,715	I.....126
Value of school-houses and grounds.....	\$29,287,749	\$30,287,897	I \$1,000,148
EXPENDITURES.			
Paid teachers.....	\$6,252,518	\$6,382,373	I...\$129,855
Paid superintendents.....	190,450	186,215	D.....4,235
Paid for sites and buildings.....	1,033,085	1,300,085	I.....266,180
Fuel and other contingent expenses.....	1,876,766	2,045,941	I.....169,175
Total expenditures.....	9,353,639	9,914,614	I.....560,975

a Some of the statistics contained in this summary differ slightly from the returns made to the Bureau of Education.

Commissioner Hancock pays a worthy tribute to the memory of his distinguished predecessor in the office of State commissioner of common schools, Dr. Eli T. Tappan, who died October 23, 1888. Dr. Tappan began his work as an educator in the public schools of Steubenville in 1857, but he was soon elected professor of mathematics in the Ohio University at Athens, which position he held until 1863, with the exception of a few years spent as professor in the Mt. Auburn Young Ladies' Institute. In 1869 he was elected president of Kenyon College, with which institution he was connected until he entered upon his duties as State commissioner of common schools.

Although he was connected with institutions for higher education nearly all his life, yet he took an active interest in the work of the common schools and did much to improve them. Probably no man in the State was better acquainted with their condition and needs.

In February, 1825, a general school law was passed; by it for the first time a general tax for school purposes was required to be levied. No provision was made for normal schools or for supervision, and neither of these provisions has yet been supplied. Outside of the cities and larger towns there is practically no supervision. All but ten of the other States and all the Territories but three have county supervision.

In 1847 a law was passed permitting county supervision whenever the county commissioners should appropriate a sufficient sum to pay the salary of a superintendent.

Only three counties ever availed themselves of this privilege. What is needed is a general school law providing supervision for all the schools of the State.

Many of the teachers employed in the public schools in rural districts have not had the necessary experience to become thorough teachers, and so long as the salaries of teachers remain as low as at present it cannot be expected to be otherwise. Superintendents are needed to improve the work of such teachers.

VIRGINIA.

[From Report for 1887-88 of State Superintendent John L. Buchanan.]

STATISTICAL SUMMARY.

	1886-87.	1887-88.	Increase or Decrease.
ATTENDANCE.			
Number of white pupils enrolled.....	209,638	211,449	I.....1,811
Number of colored pupils enrolled	115,546	118,831	I.....3,285
Total number enrolled	325,184	330,280	I.....5,096
Average daily attendance of white pupils.....	121,571	124,994	I.....3,423
Average daily attendance of colored pupils.....	62,949	64,422	I.....1,473
Total number in average daily attendance	184,520	189,416	I.....4,896
TEACHERS AND SALARIES.			
Number of white teachers.....	5,305	5,373	I.....68
Number of colored teachers.....	1,856	1,909	I.....53
Total number of teachers	7,161	7,282	I.....121
Average monthly salary of males.....	\$31.20	\$31.00	D.....\$.20
Average monthly salary of females.....	\$26.62	\$26.40	D.....\$.22
MISCELLANEOUS.			
Number of pupils supplied with text-books.....	9,788	9,886	I.....98
Average number of months taught.....	6.01	5.95	D......06
Average number of pupils enrolled, per school.....	45	45	.....
Average number of pupils in daily attendance, per school.....	25	26	I.....1
EXPENDITURES.			
Paid teachers.....	\$1,181,907	\$1,186,353	I.....\$4,446
Total current expenditures	1,381,630	1,389,242	I.....7,612
Cost of tuition per month, per pupil enrolled.....	.61	.60	D......01
Cost of tuition, per month, per pupil in average attendance.....	1.06	1.05	D......01
Whole cost of education per month, per pupil enrolled.....	.71	.70	D......01
Whole cost of education per month, per pupil in average attendance.....	1.24	1.22	D......02

GENERAL STATEMENTS.

A review of the work done by the public schools for the last five years shows that the schools have been gradually but uniformly improving. But there still remains a very large proportion of the school population not attending school. The number of children five to twenty-one years of age was about six hundred thousand, but the school enrollment was only a little over three hundred thousand, or 54 per cent., and the average daily attendance was less than two hundred thousand. Of these pupils, 9,886 were furnished with text-books by the State. There was an increase of one hundred and twenty-nine in the number of schools, but a slight decrease in the salaries of teachers and in the length of the school sessions.

COMPULSORY ATTENDANCE.

The non-attendance and irregularity of attendance of the children of school age is regarded as a very great evil, though not greater in Virginia than in some of the other States. It is an evil, too, which the State superintendent thinks it will be difficult to overcome. In twenty-four States and Territories laws for compulsory attendance have been enacted, but it is doubtful if such a law would prove effective in Virginia, where four-fifths of the population live in rural communities and in some places the population is quite sparse.

COUNTY SUPERINTENDENTS.

According to the Constitution of the State, county superintendents are to be appointed by the board of education for a term of four years, and are subject to removal for cause. According to a recent decision of the court of appeals, the term of office of all the county and city superintendents will expire on the 30th of June, 1889. Hence new superintendents are to be appointed.

"This office is of very great importance. It is well established by experience that no State school system can succeed without local supervision, and the more efficient this is, the greater the success of the system. Observation warrants the statement that in every county in this State where there is an intelligent, judicious, energetic, earnest superintendent the school work prospers, and where the superintendent lacks these qualifications the school work will lack vitality. It could not well be otherwise, in view of the manifold and responsible duties of this officer."

COUNTRY SCHOOLS.

Country schools labor under many serious disadvantages as compared with city schools. The income from local levies is much smaller, and consequently there are inferior buildings, poor furniture, smaller teachers' salaries, and shorter terms. They receive very little supervision from the county superintendents, and little or none from the local trustees. They are not usually so overcrowded as the city schools, however, and so each pupil can receive more of the teacher's attention.

GRADING OF SCHOOLS.

A plan for the grading of country schools was prepared by one of the teachers in the State Female Normal School, and has been included in the report of the State superintendent.

A great many persons who are interested in educational matters fail to get a correct idea of what a graded school is.

In a graded school each subject to be taught is divided into parts, and these parts are arranged in the order of their difficulty and complexity.

Groups are formed of the corresponding parts of each of the subjects, and are proportioned to the power and knowledge of the pupils for whom they are intended, and to the time in which they are to be taught.

Pupils are required to take all the studies of the grade to which they belong, and these must be completed before any study in the next grade is begun.

There are appointed times for general promotion, but a pupil may be promoted or demoted at any time at which it seems advisable.

The system has its disadvantages as well as its advantages; but, on the whole, it is preferable to other systems of classification.

The number of rooms or of teachers does not determine whether a school is graded or not; a school having one teacher may be just as truly graded as one having twenty teachers.

MANUAL AND INDUSTRIAL TRAINING.

This is a subject which receives much attention from educators at the present time, and the public sentiment in its favor is increasing; but there are many still strongly opposed to it. As its introduction into the public schools of Virginia would involve the expenditure of a large sum of money and necessitate the employment of teachers competent to give instruction in it, the State superintendent does not think it should be attempted at the present time.

PUBLIC SCHOOL INSTRUCTION.

Some of the criticisms made upon the instruction given in the public schools have been as follows:

1. They fail to teach morality or to cultivate the religious sentiment.
2. They fail to give an adequate mastery of the subjects of instruction.

As to the first criticism, it is not thought that the public schools fail to teach morality, and there is no reason why they should not teach it. "Is it leaning toward sectarianism or trespassing on anybody's liberty of conscience that the public schools should teach their pupils truthfulness, honesty, reverence, self-respect, self-control, regard for the rights and feelings of others, sobriety, decorum, and other kindred virtues? Surely

not; for these things are approved by all right-thinking people; they constitute, as has been well said, the practical side of religion; they are the essential elements of good character and good citizenship.

"But the upright, conscientious, earnest teacher is the most impressive lesson to the pupil. His example, his character, his spirit, is a constant moral force acting on the pupil when out of school as well as when in school, and to say that there are not a large number of such teachers in the public schools would be untrue."

As to the second criticism, that the public schools fail to give a mastery of the subjects taught, it is true in regard to many of them. There are many things to account for this; short terms, irregular attendance, frequent changes of teachers, incompetent teachers, etc. Even if it be granted, however, that the second criticism is true, the work of the public schools may still be of great value.

III.—RECORD OF WORK ACCOMPLISHED BY THE BUREAU FROM AUGUST 5, 1886, TO SEPTEMBER 3, 1889.

The work accomplished by the Bureau of Education during the past three years has been very extensive, and the results obtained fully demonstrate the utility and value of the Office to the country at large as an educational agency of the General Government. The status of the Bureau has been maintained during this period, as the resolutions approving the work undertaken and successfully completed passed at the meetings of the National Educational Association in 1887 and 1888 amply testify.

The practical value of the Bureau of Education to the vast army of American educationists is well exhibited in the following résumé of the correspondence and documentary record of the Office for the past three years.

During the year 1887 the Bureau received: written letters, 11,006; acknowledgments, 43,990; documents, 4,825; and 20,000 replies to statistical forms of inquiry; and sent out 19,354 written letters and distributed 218,526 copies of documents. In 1888, 15,197 written letters and 240,000 copies of documents were sent out, besides more than 14,000 statistical forms of inquiry; while 11,096 written letters, 12,000 statistical returns, 44,000 acknowledgments, and 6,913 documents were received.

One of the most important improvements in the internal organization of the Office has been the reduction of the number of the divisions into which it had formerly been divided, viz, from seven to three, called, respectively, the Division of Records, the Division of the Library and Museum, and the Division of Statistics. By this reduction the business of the Office has been greatly augmented, and promptness, despatch, and accuracy attained.

The publications of the Bureau have attracted great attention, not only from the leading educators of this country, but from those of foreign nations.

The press, too, has favorably criticised the interesting series of circulars of information issued by the Office, and has quoted largely from them, which is a gratifying evidence of the tide of popular opinion regarding the status and educational worth of such a branch of the General Government as a National Bureau of Education.

PUBLICATIONS.

The publications are divided into three divisions: Annual reports, special reports, and circulars of information.

During the period under review the scope of the annual reports has been broadened, and the promptness of publication, a desideratum of vital interest to educationists, has been advanced.

The following is a complete enumeration of the documents issued by the Bureau, with a list of those in press and in course of preparation from August 5, 1886, to September 3, 1889:

A.—Documents begun during the term of office of Commissioner John Eaton, but not finally completed, the work being finished, published, and distributed by his successor:

- (a) Annual Report for 1884-85.
- (b) Circular of Information No. 1, 1886: Study of Music in Public Schools.
- (c) List of Libraries in the United States.
- (d) The Special Report on Educational Exhibits and Conventions at the New Orleans Exposition of 1884-85.
- (e) The Special Report on Indian Education and Civilization.

B.—Documents projected and completed entirely during Commissioner Dawson's administration:

- (a) Annual Report for 1885-86.
- (b) Annual Report for 1886-87.
- (c) Circular of Information No. 2, 1886: Proceedings of the Department of Superintendence of the National Educational Association for 1886.
- (d) Circular of Information No. 1, 1887: The College of William and Mary.
- (e) Circular of Information No. 2, 1887: The Study of History in American Colleges and Universities.

B.—Documents projected and completed entirely during Commissioner Dawson's administration—Continued.

- (f) Circular of Information No. 3, 1887: Proceedings of the Department of Superintendence of the National Educational Association for 1887.
- (g) Circular of Information No. 1, 1888: Thomas Jefferson and the University of Virginia.
- (h) Circular of Information No. 2, 1888: History of Education in North Carolina.
- (i) Circular of Information No. 5, 1888: Industrial Education in the South.
- (j) Circular of Information No. 6, 1888: Proceedings of the Department of Superintendence of the National Educational Association for 1888.
- (k) Circular of Information No. 3, 1888: History of Higher Education in South Carolina.
- (l) Circular of Information No. 4, 1888: Education in Georgia.
- (m) Circular of Information No. 7, 1888: History of Education in Florida.
- (n) Circular of Information No. 1, 1889: Higher Education in Wisconsin.
- (o) Report of the Visit to Alaska of the Hon. N. H. R. Dawson, Commissioner of Education, 1887.
- (p) Alaska: An Address by the Commissioner of Education before the Department of Superintendence, February 16, 1888.

C.—Documents in press Sept. 3, 1889:

- (a) Annual Report for 1887-88.
- (b) Special Report upon American Education in Fine and Industrial Art, Part II.
- (c) Special Report on Public Libraries, Part II: Rules for a Dictionary Catalogue.
- (d) History of Education in Alabama.
- (e) Higher Education in Indiana.
- (f) History of Federal and State Aid to Higher Education.
- (g) Proceedings of the Department of Superintendence of the National Educational Association for 1889.
- (h) The Teaching and History of Mathematics in the United States.

D.—Documents in course of preparation:

- (a) Annual Report for 1888-89.
- (b) Monograph on School Architecture and Hygiene, by Dr. A. P. Marble, superintendent of public schools, Worcester, Mass.
- (c) Monograph on Examinations and Promotions, by Dr. E. E. White, superintendent of public schools, Cincinnati, Ohio.
- (d) Monograph on the Training of Teachers in the United States, by Prof. J. P. Gordy, of the Ohio University, Athens, Ohio.
- (e) Report on the Educational Congresses and Exhibits at the Paris Exposition, 1889, by Dr. W. T. Harris.
- (f) History of Normal Schools, by Hon. M. A. Newell, State Superintendent of Public Instruction, Baltimore, Md.
- (g) Monographs on the educational history of Maine, Massachusetts, New Hampshire, Vermont, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Delaware, Maryland, District of Columbia, Ohio, Kentucky, Tennessee, Mississippi, Louisiana, Texas, Arkansas, Kansas, Missouri, Iowa, Minnesota, Nebraska, Nevada, California, and Oregon.

Work upon the Annual Report of the Office for 1888-89 was taken up in the spring of 1889, as soon as the compilation of the Report of the preceding year had been finished, and by the close of August had made considerable progress toward completion. It is hoped that it may be completed and ready for printing by the end of December.

One of the most interesting and valuable inquiries ever projected by the Bureau of Education in behalf of the educational interests of the country has been the exhaustive investigation set on foot into the history of education in the various States of the Union. The conception was an original one, and the results of the researches have thus far been eminently satisfactory. The inquiries have done much to stimulate and promote education in the States, and have attracted great attention from leading scholars and educators of the United States. The work has been done under the editorial supervision of Dr. Herbert B. Adams, of the Johns Hopkins University, whose particular abilities as an original historical investigator are well known and appreciated.

These publications, though embraced in the generic term Circulars of Information, nevertheless are distinct, occupying a field peculiarly their own, and are called Contributions to American Educational History. Seven have been published and widely distributed throughout the country up to September 3, 1889.

The first of the series, a monograph upon William and Mary College, by the editor, Dr. Adams, proved to be a powerful agent in reviving the ancient historical institution of Virginia, as was freely acknowledged by General William B. Talliaferro, president of the board of governors.

The second, also written in the main by Dr. Adams, upon Thomas Jefferson and the University of Virginia, was an exhaustive and elaborate exposition of the undercurrent of ideas that led to the founding of the leading university of the South and the influence exerted by it upon Southern thought and educational progress. In addition to the editor's philosophical paper were authorized sketches of Hampden-Sidney, Randolph-Macon, Emory and Henry, Roanoke, and Richmond Colleges, and of Washington and Lee University, by the leading representatives of those institutions. The value of this monograph was enhanced by many fine illustrations, among which were fac simile copies of Jefferson's original drawings for the construction of the university buildings.

The third of the series was the "History of Education in North Carolina," by Dr. Charles Lee Smith, a native of that State and sometime Fellow in History at the Johns Hopkins University. The origin of the common school system of North Carolina was ably treated by the author in this monograph, and his information concerning the higher institutions of the State was mostly obtained from personal examination of college archives and inquiries minutely pursued in all quarters among the representatives of the institutions of both races.

The fourth monograph was on "The History of Higher Education in South Carolina," by C. Meriwether, of that State, a gentleman well trained at the Johns Hopkins University in historical research. This pamphlet has been admirably received, and contains several original historical documents unattainable elsewhere, the most interesting among them being the record of the early educational efforts made in South Carolina, when yet a colony, to advance the educational progress of her sons. In addition to tracing the development of higher education the author made interesting investigations into the evolution of the public school system of the State.

The fifth in the series relates to the "History of Education in Georgia," and is the work of Charles Edgeworth Jones, son of Col. C. C. Jones, of Augusta, the historian of the State. It is an able treatise on the institutions for both races in Georgia, and exhibits much interesting data concerning the inception and growth of the free-school system.

Prof. George Gary Bush, Ph. D., a graduate of Heidelberg University, prepared the sixth contribution to American educational history, and he was peculiarly fitted for the task owing to his winter residence in Florida for the past ten years. Although the materials were exceedingly scant for an elaborate treatise on the rise and progress of education in that State, yet Professor Bush produced a most creditable work and one of the most interesting in the series.

The seventh monograph treats of "Higher Education in Wisconsin," and was executed by Prof. William F. Allen, of the University of Wisconsin, and Mr. David Spencer, one of the advanced graduate students of that institution. The interest is maintained throughout, and the work exhibits careful investigation and analysis.

THE LIBRARY.

One of the most interesting features of the Bureau of Education is the library, which has been advanced, as far as means would allow, to a high state of excellence. The value of the pedagogical collection of the library, to which numerous accessions have been made within the past three years, cannot be too highly estimated when judged from the stand-point of the educator. Leading educators and writers of the country have fully appreciated its value in the past, and have on numerous occasions consulted its rich storehouse of pedagogical lore, notable among the recent investigators being Dr. Herbert B. Adams and the other contributors to the monographs on American educational history, Prof. Lucian Cajori, Prof. R. G. Boone, author of the interesting work recently published, "Education in the United States," and others.

Not only have inquiries been made by educators in this country, but correspondents from abroad have had recourse to the Bureau's library for information. The library force of the Office in response to these solicitations for information have prepared over five hundred cards the past year, containing references for investigators of various subjects.

On June 16, 1888, was commenced the preparation of a finding list of the library, which necessitated the copying of fifteen hundred pages of manuscript and the inscribing of some twenty thousand cards, the books in the meanwhile having been classified and re-arranged on the shelves according to subjects.

The fine collection of pedagogical and statistical works in the foreign section of the library was catalogued and arranged in a similar manner, which required a considerable amount of technical labor.

An important phase of the work in the pamphlet section was the chronological arrangement by decades or half decades, and the preparation for the bindery of the collection of college catalogues of the Bureau. Of these there have been bound over four hundred volumes.

The number of volumes and pamphlets in the library has been greatly increased. At the end of July, 1886, there were on the shelves of the library 18,500 volumes and 50,000 pamphlets; at the present writing there are 23,500 volumes and 90,000 pamphlets.

THE PERSONNEL OF THE OFFICE.

The two lists following give the names of the employés of the Office at the dates named, together with certain particulars regarding their terms of service, etc.:

I.—List of Employés August 6, 1886.

Name.	Whence Appointed.	Date of Original Appointment.	Date of Appointment in Force.	Legal Residence.		Compensation.
				State.	Congressional District.	
Chief Clerk.						
William H. Gardiner ¹	Ill.....	Feb. 14, 1882	Feb. 21, 1882	N. H.....	1st.....	\$1,800
Clerk.						
Isaac N. Wyckoff.....	N. Y.....	Sept. 5, 1884	Sept. 5, 1884	N. Y.....	19th...	1,200

DIVISION OF STATISTICS.

<i>Collector and Compiler of Statistics.</i>						
Isaac Edwards Clarke.....	N. Y.....	June 24, 1880	Aug. 17, 1882	N. Y.....	10th....	2,400
<i>Statistician.</i>						
Charles Warren.....	Ill.....	Oct. 13, 1870	Aug. 17, 1882	Ill.....	1st.....	1,800

FOREIGN STATISTICS.

<i>Clerk.</i>						
Miss Frances G. French.....	Me.....	June 2, 1879	Aug. 17, 1882	Me.....	4th.....	1,200
<i>Translator.</i>						
Miss Annie Tolman Smith.....	D. C.....	Jan. 27, 1879	July 6, 1885	D. C.....	.....	1,600

STATISTICS IN GENERAL.

<i>Clerks.</i>						
Miss Mary S. Williams ²	Conn.....	Apr. 18, 1878	Aug. 17, 1882	Conn.....	3rd.....	1,400
Daniel Rhodes ³	Colo.....	Nov. 24, 1885	Nov. 24, 1885	D. C.....	.....	1,400
Frederick E. Upton.....	N. J.....	Dec. 17, 1885	Dec. 17, 1885	N. J.....	3rd.....	1,400
Wellford Addis.....	D. C.....	Aug. 17, 1882	July 30, 1885	D. C.....	.....	1,200
Mrs. Rebecca L. Foot.....	S. C.....	Jan. 6, 1876	Aug. 17, 1882	N. Y.....	14th....	1,000
<i>Copyists.</i>						
Miss Margarette Bingley.....	Va.....	Jan. 3, 1879	July 1, 1880	Va.....	2nd.....	900
Miss Fanny S. Crosby ⁴	Ill.....	Oct. 20, 1880	Aug. 17, 1882	Ill.....	6th.....	900
<i>Collectors of Statistics.</i>						
Mrs. Sarah B. Cooper ⁵	Cal.....	Aug. 13, 1879	Aug. 1, 1885	Cal.....	4th.....	*50
Calvin M. Parks.....	Utah.....	Aug. 13, 1879	Aug. 1, 1885	Utah.....	.....	*50

^{*}Per quarter.¹Resigned May 31, 1887.²Resigned December 31, 1886.³Transferred to General Land Office, July 1, 1887.⁴Resigned May 31, 1888.⁵Removed August 7, 1886.

I.—List of Employés, August 6, 1886—Continued.

DIVISION OF ABSTRACTS.

Name.	Whence Appointed.	Date of Original Appointment.	Date of Ap- pointment in Force.	Legal Residence.		Compensation.
				State.	Congressional District.	
<i>Chief.</i>						
Alexander Shiras.....	Pa.....	Nov. 26, 1873	July 3, 1874	Pa.....	2d	\$1,600
<i>Clerks.</i>						
Mrs. Julia A. Holmes ¹	Kans.....	July 1, 1870	Sept. 4, 1884	Kans.....	2d	1,400
John Dudley ²	Ind.....	Oct. 26, 1881	Aug. 17, 1882	Ind.....	7th	1,200
<i>Copyists.</i>						
Mrs. Helen E. Shepherd.....	Me	Mar. 1, 1877	July 11, 1883	Me	3d	900

LIBRARY.

<i>Clerks.</i>						
Henderson Presnell	Tenn.....	June 1, 1881	Sept. 30, 1885	Tenn.....	1st.....	1,800
Mrs. Lucia J. K. Clark	Minn.....	Apr. 1, 1874	Aug. 17, 1882	Minn.....	1st.....	1,000
<i>Copyists.</i>						
Mrs. Mollie J. Greene ³	Ill.....	July 15, 1879	Aug. 17, 1882	Ill.....	19th	900
Miss Frances C. Darrall ⁴	La.....	Oct. 15, 1880	Nov. 10, 1885	La.....	3d.....	800

DIVISION OF CORRESPONDENCE AND FILES.

<i>Clerks.</i>						
Mrs. Harriette F. Hovey	D. C.....	Sept. 24, 1878	Aug. 17, 1882	Ill.....	14th	1,600
Miss Eleanor T. Chester	Ill.....	June 14, 1872	Aug. 17, 1882	Ill.....	3d	1,200
<i>Copyists.</i>						
Mrs. Aduella P. Bryant	Tenn.....	Sept. 15, 1879	July 4, 1881	Tenn.....	6th	900
Mrs. N. H. McRoberts	D. C.....	Feb. 6, 1882	Aug. 17, 1882	D. C.....	.....	900
Miss Caroline G. Forbes	Va.....	Sept. 17, 1879	Nov. 10, 1885	Va.....	1st.....	900
Mrs. Margaret E. Army ⁵	Del.....	July 1, 1879	July 6, 1885	Del.....	.....	800
<i>Assistant Messenger.</i>						
Mrs. Frances A. Reigart	Colo.....	July 23, 1885	July 23, 1885	Colo.....	.....	720

DIVISION OF DOCUMENTS, AND MUSEUM.

<i>Clerk.</i>						
Almos P. Bogue	Mich.....	July 1, 1872	Aug. 17, 1882	Mich.....	5th.....	1,200
<i>Skilled Laborer.</i>						
William H. Moffat ⁶	D. C.....	Sept. 22, 1879	July 6, 1885	D. C.....	.....	\$40

¹ Died January 20, 1887.² Resigned November 30, 1886.³ Resigned January 15, 1887.⁴ Transferred to Pension Office March 16, 1889.⁵ Resigned March 15, 1887.⁶ Removed June 4, 1887.

I.—List of employes, August 6, 1886—Continued.

LABORERS.

Name.	Whence Appointed.	Date of Original Appointment.	Date of Appointment in Force.	Legal Residence.		Compensation.
				State.	Congressional District.	
Charles Pryor ¹	D. C.	July 1, 1880	July 1, 1880	D. C. ....	.....	\$660
Washington Jones ²	D. C.	Jan. 18, 1881	Dec. 26, 1884	D. C. ....	.....	660
David M. Turner ³	Ga.	Feb. 18, 1881	Sept. 3, 1884	Ga.	5th	480
Walter T. Byron.....	D. C.	Aug. 9, 1883	Dec. 26, 1884	D. C. ....	.....	480
James R. Durham.....	W. Va. ...	Sept. 23, 1884	Dec. 26, 1884	W. Va. ...	1st	400
Miss Myra E. Ourand ⁴	D. C.	Dec. 26, 1884	Dec. 26, 1884	D. C. ....	.....	360

EDUCATION IN ALASKA.

<i>General Agent of Education in Alaska.</i>						
Sheldon Jackson.....	Alaska..	Apr. 11, 1885	Apr. 11, 1885	Alaska ..	.....	1,200

II.—List of Employes, September 1, 1889.

<i>Chief Clerk.</i>						
John W. Holcombe ...	Ind.....	May 13, 1887	May 13, 1887	Ind.....	7th.....	\$1,800
<i>Confidential Clerk to the Commissioner.</i>						
Lawrence Percy Dawson.....	Ala.	Nov. 8, 1886	Nov. 8, 1886	Ala.	4th.....	1,800

DIVISION OF RECORDS.

<i>Chief Clerk in charge.</i>						
<i>Clerks.</i>						
Mrs. Harriette F. Hovey.....	D. C.	Sept. 24, 1878	Aug. 17, 1882	Ill.	14th....	1,600
Isaac N. Wyckoff.....	N. Y.	Sept. 5, 1884	Jan. 20, 1887	N. Y.	19th....	1,400
Miss Eleanor T. Chester	Ill.	June 14, 1872	Aug. 17, 1882	Ill.	3d	1,200
Almos P. Bogue.....	Mich.	July 1, 1872	Aug. 17, 1882	Mich.	5th.....	1,200
<i>Copyist.</i>						
Miss Caroline G. Forbes	Va.	Sept. 17, 1879	Nov. 10, 1885	Va.	1st.....	900

LIBRARY AND MUSEUM.

<i>Clerk in charge.</i>						
Henderson Presnell	Tenn.....	June 1, 1881	Sept. 30, 1885	Tenn.....	1st.....	1,800
<i>Clerks.</i>						
Miss Frances G. French.....	Me.	June 2, 1879	Aug. 17, 1882	Me.	4th.....	1,200
Mrs. Lucia J. K. Clark.....	Minn.	April 1, 1874	Jan. 20, 1887	Minn.	1st.....	1,200
<i>Copyists.</i>						
Mrs. A. P. Bryant.....	Tenn.....	Sept. 15, 1879	July 1, 1881	Tenn.....	6th.....	900
Mrs. Helen E. Shepherd	Me.	Mar. 1, 1877	July 11, 1883	Me.	3d	900
Mrs. Virginia L. Moore	Tex.	Sept. 28, 1885	Apr. 1, 1889	Tex.	11th....	800
William A. Jackson.....	Ala.	July 12, 1889	July 15, 1889	Ala.	6th.....	720

¹ Removed September 30, 1886.² Removed July 1, 1883.³ Removed October 5, 1886.⁴ Resigned September 30, 1887.

II.—List of Employés September 1, 1889—Continued.

DIVISION OF STATISTICS.

Name.	Whence appointed.	Date of Original Appointment.	Date of Appointment in Force.	Legal Residence.		Compensation.
				State.	Congressional District.	
<i>Statistician.</i>						
Charles Warren.....	Ill	Oct. 13, 1870	Aug. 17, 1882	Ill	1st.....	\$1,800
<i>Translator.</i>						
Miss Annie T. Smith.....	D. C	Jan. 27, 1879	July 6, 1885	D. C		1,600
<i>Clerks.</i>						
Frederick E. Upton.....	N. J.....	Dec. 17, 1885	Apr. 22, 1887	N. J.....	3d	1,600
James C. Boykin.....	Ga.....	Apr. 23, 1887	July 13, 1887	Ga.....	5th.....	1,400
Wellford Addis.....	D. C.....	Aug. 17, 1882	Sept. 3, 1883	D. C.....		1,400
Henry R. Evans.....	Md.....	Apr. 22, 1887	Nov. 4, 1887	Md.....	3d	1,200
Alexander Shiras.....	Pa.....	Nov. 26, 1873	Sept. 3, 1883	Pa.....	2d	1,200
Lewis A. Kalbach.....	Pa.....	Apr. 22, 1887	July 16, 1883	Pa.....	8th	1,000
<i>Copyists.</i>						
Miss Margarette Bingley.....	Va.....	Jan. 3, 1879	July 1, 1880	Va.....	2d	900
Mrs. Nannie H. McRoberts	D. C.....	Feb. 6, 1882	Aug. 17, 1882	D. C.....		900
Allen E. Miller.....	S. C.....	Apr. 22, 1887	Nov. 4, 1887	S. C.....	3d	900
Mrs. Frances A. Reigart.....	Colo.....	July 28, 1885	Aug. 8, 1883	Colo.....		900
Ulysses S. Catlett	Tenn.....	June 27, 1889	July 1, 1889	Tenn.....	2d	800
<i>Collector and Compiler of Statistics.</i>						
Isaac Edwards Clarke	N. Y.....	June 24, 1880	Aug. 17, 1882	N. Y.....	10th ...	2,400
<i>Clerk.</i>						
Mrs. Rebecca L. Foot.....	S. C.....	Jan. 6, 1876	Aug. 17, 1882	N. Y.....	14th ...	1,000

LABORERS, ETC.

<i>Skilled Laborer.</i>						
Thomas Casey.....	Ala.....	May 27, 1887	May 27, 1887	Ala.....	6th.....	840
<i>Assistant Messenger.</i>						
George Knowles.....	D. C.....	July 1, 1889	July 1, 1889	D. C.....	.....	720
<i>Laborers.</i>						
Frank Morrison.....	Ala.....	Sept. 23, 1886	Sept. 23, 1886	Ala.....	4th.....	660
John D. Marshall.....	Del.....	Aug. 21, 1888	Aug. 21, 1888	Del.....	.....	660
Walter T. Byron.....	D. C.....	Aug. 9, 1883	Dec. 26, 1884	D. C.....	.....	480
James R. Durham.....	W. Va.....	Sept. 23, 1884	Oct. 2, 1886	W. Va.....	1st.....	480
John H. Chun.....	Md.....	Oct. 2, 1886	June 7, 1887	Md.....	5th.....	400
Stafford Payne.....	D. C.....	Nov. 12, 1883	Nov. 12, 1888	D. C.....	.....	360

EDUCATION IN ALASKA.

<i>General Agent of Education in Alaska.</i>						
Sheldon Jackson.....	Alaska ..	Apr. 11, 1885	Apr. 11, 1885	Alaska ..	.....	1,200
<i>Members of Territorial Board of Education in Alaska.</i>						
Judge of District Court, chairman ..	.....	.....	.....	.....	.....	200
Governor of the District ..	.....	.....	.....	.....	.....	200
James Sheakley.....	Pa.....	June 23, 1887	Aug. 15, 1888	Pa.....	26th ..	200
William Duncan.....	Alaska ..	Aug. 15, 1883	Aug. 15, 1888	Alaska	200
The General Agent, secretary	200

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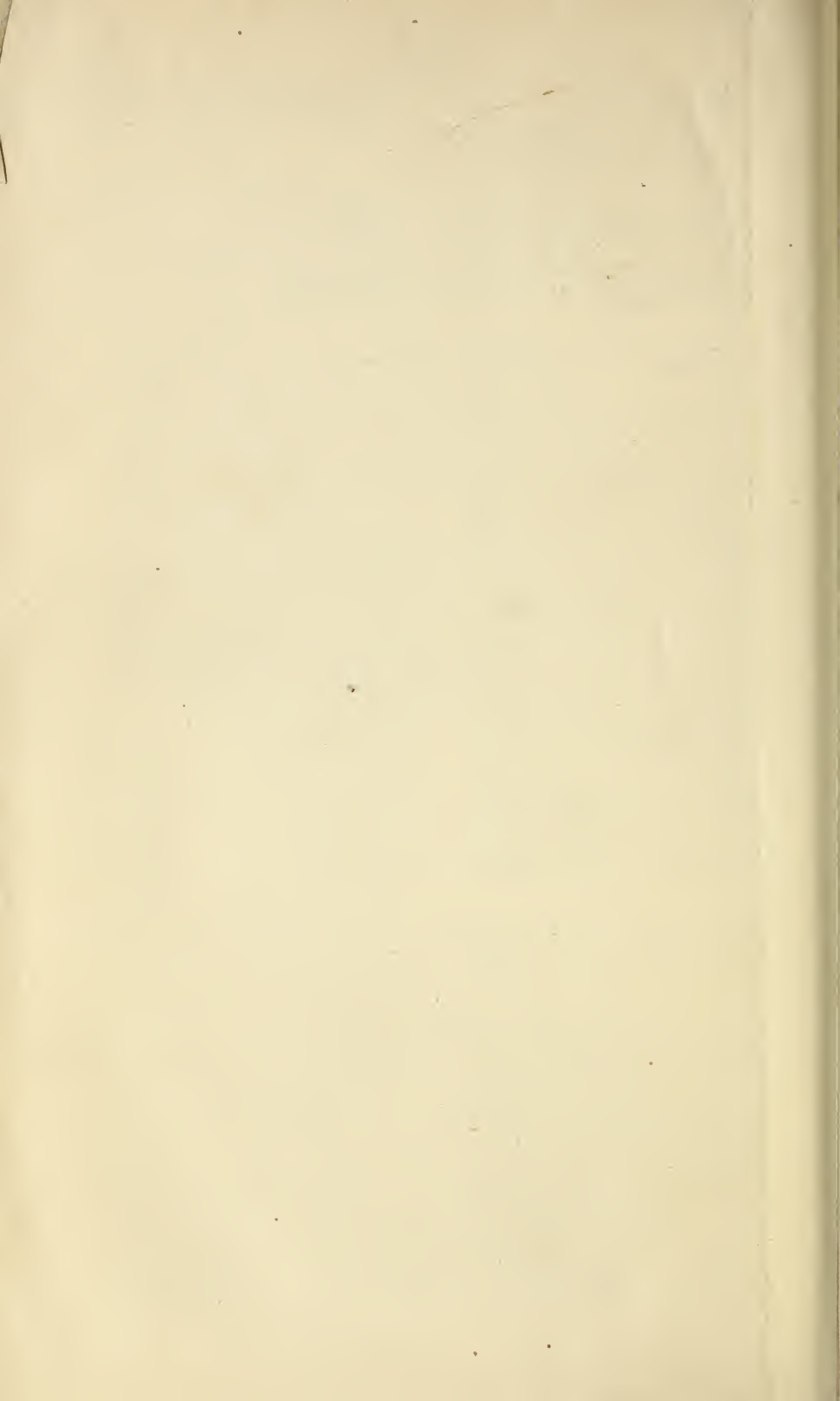
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